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R 400.20608

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R 400.20614

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R 400.20615

Source: 1983 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF WORKERS' DISABILITY COMPENSATION

GENERAL RULES

PART 1. RECORDS

R 408.31 Report of injury; claim for compensation, additional reports; weekly rate of compensation.

Rule 1. (1) An employer shall report immediately, to the bureau, on form 100, all injuries, including diseases, which arise out of and in the course of the employment, or on which a claim is made, and result in any of the following:

- (a) Disability extending beyond 7 consecutive days, not including the date of injury.
- (b) Death.
- (c) Specific losses.

(2) Any report of injury filed with the bureau by an employer that fails to meet the requirements of subrule (1) of this rule shall not be maintained as a record of the bureau unless filed with a form 107.

(3) An employer shall give a copy of the report of injury (form 100) to the injured employee immediately and in the case of death, to the dependent. Form 100 shall indicate compliance with this requirement. A delay in reporting shall not occur because of this requirement. In case of death, an employer shall also immediately file an additional report on form 106.

(4) An employee shall make a claim for compensation to the bureau on form 117. The bureau shall mail a copy of form 117 to the employer.

(5) After an employee has given an employer the name of the physician with whom he or she intends to seek treatment and has commenced treatment with the physician under section 315 of the act, the employee shall obtain and promptly furnish a report to the employer, insurance company, or self-insurers' security fund. The report shall set forth the history obtained, the diagnosis, the prognosis, and other information reasonably necessary to properly evaluate the injury, the disability, and the necessity for further rehabilitation or treatment. Thereafter, at reasonable intervals of not more than 60 days, an employee shall obtain and furnish a current medical report, paid for by the carrier, containing the same information,

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together with an itemized statement of charges for services rendered to date. A self-insured employer, insurance company, or self-insurers' security fund is not required to make payment to the physician until the reports and itemized charges have been furnished to it. Medical fees shall not exceed fees considered usual and reasonable for the services performed in accordance with the health care service rules.

(6) For a case that requires the payment of compensation, a carrier, the second injury fund, the self-insurers' security fund, and the silicosis, dust disease and logging industry compensation fund, shall file all of the following reports, notices, or statements as required by the bureau:

(a) Form 701 on the day after the first payment of compensation. The carrier or fund shall furnish a copy of form 701 to the employee.

(b) Form 701 on the day after the stopping of payment of compensation showing the amount of compensation paid in every case. Subject to R 408.40, when compensation is stopped on the basis that the employee has recovered from disability or that the employee is able to return to work, but has not done so, the medical report supporting this position shall be attached to form 701, or filed within 30 days thereafter. When a supplemental form 701 is filed, only that amount not previously reported shall be shown. In a case that requires the filing of form 701, the carrier and the funds shall, in writing, advise the injured employee whose benefits have stopped of the reasons for the action taken at the same time by furnishing a copy of the form 701 to the employee.

(c) The director may require a report showing the amount of compensation actually paid in cases where payment of compensation has not been previously stopped as of December 31 by the filing of form 701, for that calendar year, regardless of the length of time the case was open. If during the calendar year a form 701 had been previously filed, then only the payments made during the calendar year after the filing of form 701 shall be reported. The report shall be furnished to the bureau at a time and in a manner as the director may reasonably require.

(d) Immediate notification to the bureau of any change in the rate of compensation. The notice shall state the reason on form 701. The carrier or fund shall send a copy to the employee.

(e) A statement of the attending physician in every specific loss. The statement shall identify the date and extent of the loss.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.31a Computation of weeks and days.

Rule 1a. In computing periods of disability and of compensation, a week shall be computed as 7 days and a day as 1/7 of a week, without regard to Sundays, holidays, and working days.

History: 1999 MR 4, Eff. May 11, 1999.

R 408.32 Compensation supplement fund; "maximum benefit" defined.

Rule 2. (1) A carrier, second injury fund, or self-insurers' security fund shall claim reimbursement from the compensation supplement fund for payments made in accordance with section 352 of the act. A carrier, second injury fund, or self-insurers' security fund, shall make a claim on bureau form 114, application for reimbursement.

(2) A carrier, second injury fund, or self-insurers' security fund shall make an initial application for reimbursement not later than 3 months after the end of the quarter for which the right to reimbursement first accrues. The right to reimbursement first accrues on the first day of the quarter following any quarter for which supplemental benefits are first paid or ordered to be paid.

(3) A carrier, second injury fund, or self-insurers' security fund may make subsequent application for reimbursement quarterly, but not later than 1 year after the closing date of the quarter for which reimbursement is being requested.

(4) A carrier, second injury fund, or self-insurers' security fund shall submit a separate form 114 for each quarter for which reimbursement is requested. A quarter, as used in this rule, is based on a calendar year as identified by the bureau on an annual basis.

(5) Upon a proper showing of a claim for reimbursement, the compensation supplement fund shall make payment within a reasonable time after the receipt of the claim. The compensation supplement fund shall

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normally make reimbursement within 3 months after the receipt of form 114, unless a dispute arises.

(6) For the purpose of these rules, "maximum benefit" means the statutory maximum for the year of injury upon which benefits are based; 2/3 of the employee's average weekly wage on the date of injury; the minimum compensation rate in effect on the date of injury; or a maximum compensation rate established by bureau order. If an employee, or his or her dependents, is receiving maximum benefits as defined in this subrule, there will be a presumption that benefits are being paid under section 351 or 321 of the act.

(7) A compensation supplement shall not be paid for any of the following received by an eligible employee or dependent:

(a) Benefits received for any period of disability before January 1, 1982.

(b) Benefits received under an agreement to redeem the liability of the carrier.

(c) A lump sum payment for remarriage under section 335 of the act.

(d) Interest paid on benefits awarded by a magistrate.

(e) Partial compensation paid under section 361(1) of the act.

(8) In a case involving a lump sum advance payment, supplemental benefits shall not be part of the advance payment, but shall continue to be paid weekly.

(9) In a case involving the carrier's right to subrogation in a third-party recovery, the amount of supplemental benefits shall be based on the weekly compensation rate that the employee would have been receiving on January 1, 1982.

(10) If compensation supplement benefits have been paid and if the employee is later found to be entitled to total and permanent disability benefits, then the second injury fund shall reimburse the compensation supplement fund for the appropriate amount of benefits paid by the compensation supplement fund, and the second injury fund shall reimburse the carrier for the balance of benefits that would have otherwise been paid by the compensation supplement fund.

(11) If the second injury fund is paying differential benefits directly to the injured employee and if the amount of differential benefits increases, then the second injury fund either shall reimburse the compensation supplement fund for any overpayment of monies that the compensation supplement fund has already reimbursed the carrier or shall reimburse the carrier directly in cases where the compensation supplement fund has not yet reimbursed the carrier.

(12) If a case is on appeal over the issue of whether the injured employee is totally and permanently disabled and if the claimant is receiving 70% of the amount of differential benefits that would be owed if total and permanent disability is found to apply, the amount of supplement that is due may be reduced or offset by the 70% amount that is being paid.

(13) If the compensation supplement fund has reimbursed a carrier for the supplemental benefits paid, and if it is later found that the amount reimbursed included an overpayment, then the compensation supplement fund shall be entitled to recoupment of the overpayment from the carrier. The carrier is entitled to recoup the overpayment from the employee.

(14) Section 357 of the act shall not be applied when the amount of supplemental benefit, as provided for in section 352 of the act, is calculated for eligible employees whose date of personal injury is before July 1, 1968.

(15) After the supplemental benefit has been computed in accordance with section 352(1) of the act, based on the weekly compensation rate that the employee or dependent of a deceased employee is receiving or is entitled to receive on January 1, 1982, had the employee been receiving benefits at that time, the supplemental benefit shall not be reduced or increased by changes to the weekly compensation rate that occur after January 1, 1982, except as provided in section 352 and in this rule.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; 1986 MR 9, Eff. Oct. 14, 1986; 1999 MR 4, Eff. May 11, 1999.

R 408.32a Medical benefits; reimbursement application.

Rule 2a. (1) To be reimbursed for payments made in accordance with the provisions of section 862(2) of the act, medical benefits shall have been required by the terms of an award and shall have been paid in accordance with section 315 of the act and the rules promulgated under section 315. In providing benefits as required by section 862(2) of the act, a carrier shall require that the employee and the provider comply with

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the requirements of section 315 of the act and the rules promulgated under section 315.

(2) Reimbursement shall apply only to cases for which an initial application for mediation or hearing is filed after March 31, 1986, under section 847 of the act. Claims shall be made on forms provided by the bureau and sent to the bureau of workers' disability compensation. If other insurance coverage is or was available to cover medical benefits paid under section 862(2) of the act, then the bureau will not make reimbursement.

(3) Applications for reimbursement from the bureau shall be made not less than 30 days after the benefit amount is reduced or rescinded by a final determination. An application for reimbursement shall be made not later than 1 year after a final determination is entered that reduces or rescinds benefits.

(4) Reimbursement from the bureau shall be consistent with benefits awarded in the magistrate's decision. Reimbursement will only be made for medical benefits that were provided between the bureau's mailing date of the magistrate's award and the mailing date of the final determination of the appeal or for a shorter period as specified in the award. A copy of the magistrate's order and all subsequent appellate decisions shall accompany each request for reimbursement.

(5) A copy of the medical bills, proof of payment, and a medical report with sufficient documentation to demonstrate that the medical services provided fall within the provision of the magistrate's decision shall accompany each request for reimbursement. Proof of payment shall include certification from the carrier that it has paid the medical bills or, if requested by the bureau, shall include a receipt from the provider which shows that payment has been made.

(6) Reimbursement shall not be paid if the claim was redeemed before the final determination or if the carrier has not provided proper documentation.

(7) The bureau shall not pay interest on reimbursable amounts.

(8) If the bureau determines that all or part of the request for reimbursement is not proper, then the bureau shall notify the carrier in writing. If the carrier disputes the determination, then it may file an application for mediation or hearing.

History: 1989 MR 10, Eff. Nov. 4, 1989; 1999 MR 4, Eff. May 11, 1999.

R 408.33 Disputed claims; late payment penalty.

Rule 3. (1) On or before the fourteenth day after the employer has notice or knowledge of an alleged injury or death, a carrier and the self-insurers' security fund shall notify the bureau, on form 107, if the right of the injured or dependent to compensation is disputed. If compensation thereafter is paid, report it on form 701. A copy of form 107, notice of dispute, shall be mailed or given to the injured employee.

(2) The following subdivisions govern the administration and enforcement of the penalty provisions under section 801 of the act:

(a) Under section 801(1) of the act, compensation shall be paid promptly and directly to the person entitled to compensation. Weekly benefits become due and payable on the fourteenth day after the employer has notice or knowledge of the disability or death. On that date, all compensation which has accrued shall be paid. If benefits are not paid within 30 days of becoming due and payable, then the carrier shall pay to the employee \$50.00 per day for each day after 30 days that the benefits remain unpaid, not to exceed \$1,500.00.

(b) If a case is in litigation and the defendant agrees to pay benefits on a voluntary basis, then the magistrate shall specify the weekly compensation rate, the period of time for which accrued benefits have become due, and which medical bills shall be paid by the carrier as a result of the injury or disability. If the benefits agreed to are not paid within 30 days of the date the agreement is formalized by the magistrate, then the carrier shall pay to the employee \$50.00 per day for each day after 30 days that the benefits remain unpaid, not to exceed \$1,500.00.

(c) Medical bills become due and payable on the day the carrier receives the bill. If there is a dispute resulting in a delay in paying the medical bills, then the carrier shall advise the employee and doctor of the reasons for the delay in writing. If there is no dispute and the bill remains unpaid after 30 days, then the carrier shall pay to the employee \$50.00 for each day after 30 days that the bill remains unpaid, not to exceed \$1,500.00.

(d) The travel allowance for medical examination, treatment, or rehabilitation is provided in R 408.45. The employee shall be notified, in writing, of any dispute resulting in a delay in paying travel allowance payments. If the expenses are not paid within 30 days of the date of the carrier's notification, and if the expenses are not disputed, then the carrier shall pay the employee \$50.00 for each day after 30 days that the

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expenses remain unpaid, not to exceed \$1,500.00.

(e) Under section 801(4) of the act, an employer may be liable for all or a portion of the penalty provided in section 801(2) of the act. If there is a dispute between an employer and insurance carrier as to who is liable for the payment of the penalty, the carrier shall be liable for paying the penalties, but may be entitled to reimbursement from the employer.

(f) Any employee who may be entitled to penalty payments under section 801 of the act and who has not received the payments may apply by notifying the bureau in writing. A copy of the request shall be forwarded to the carrier. In all cases, the bureau of workers' disability compensation shall respond within a reasonable period of time and shall act, as it deems appropriate, to resolve any disputes involving the penalty provisions of section 801 of the act. If a dispute continues beyond a determination by the bureau or if the director believes there is a question of compliance with the act, then the dispute may be set for a hearing under R 408.35. A party to a dispute may request a formal hearing before a magistrate.

(g) A carrier shall pay any penalty amounts due an injured employee as a result of the penalty provisions specified in section 801 of the act in a separate check. Penalty amounts are not a part of the basic benefits to which an employee is entitled for the purpose of loss or assessment.

(h) Benefits, allowances, or bills are presumed paid within 30 days if a check is mailed within 27 days of becoming due and payable under these rules.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

PART 2. HEARINGS

R 408.34 Petitions for hearing; small disputes.

Rule 4. (1) In cases of dispute coming under the jurisdiction of the bureau, any party may petition the bureau for relief. The complaining party shall file his or her petition (form 104A, 104B, or 104C) with the bureau at its Lansing office. The bureau shall then serve the adverse party with a copy of the petition and, at the same time, notify the parties of the time and place of the initial hearing. The adverse party shall file his or her answer to the petition with the bureau within 15 days after service and serve a copy of the answer on the complaining party.

(2) In any case where the compensable disability of an injured employee is undisputed and involves 1 or more disputed injury dates during the course of employment with 1 or more employers, or during the course of employment with 1 employer who is insured by 1 or more insurance carriers, the bureau may direct compensation benefits to be paid at the maximum rate, as determined in section 351 of the act, with no dependents as provided in the schedule of benefits on the earliest or initial date of injury alleged. The self-insured employer or insurance carrier that has the risk on the earliest or initial date of injury shall make the payments. Payments shall continue through the mailing date of the decision of the magistrate and shall be adjusted in accordance with the decision unless an appeal is taken. If an appeal is taken section 862 of the act shall apply. The magistrate shall order reimbursement where appropriate.

(3) In apportionment cases that are tried involving a date of injury before January 1, 1981, the primary action is between the last employer and the injured employee. All other joined employers may appear, cross-examine witnesses, give evidence, and defend on the issue of liability. In setting trial dates for such cases, only the convenience of the plaintiff and the last employer, or their attorney, shall be considered.

(4) After attempting to resolve the dispute without bureau involvement, either party may request the director to schedule a conference or the director, on his or her own motion, may schedule a conference to resolve small disputes. Parties involved in such disputes shall attend the conference.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.35 Bureau compliance hearings.

Rule 5. (1) If the director believes that there has not been compliance with the act, then the director may, on his or her own motion, give notice to the parties and schedule a hearing for the purpose of determining compliance. The notice shall contain a statement of the matter to be considered.

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(2) If a matter that is alleged to be grounds for a hearing in accordance with this rule is brought to the attention of the bureau, then the director or his or her authorized representative shall review the evidence of noncompliance with the act that is presented and, after making inquiries or investigations that he or she deems appropriate, determine if a hearing in accordance with this rule is necessary. The parties involved shall be notified within 30 days of a receipt of the request as to the time and date of hearing or the reasons for denial.

(3) The bureau shall schedule a hearing within a reasonable time, subject to the availability and schedules of hearing personnel and the parties involved. A request for a hearing under this rule shall, at a minimum, contain sufficient information to warrant investigation or inquiry into a matter. The request for hearing shall include, but is not limited to, all of the following information:

(a) Facts and law involved in the alleged failure to comply, including names, dates, amounts, or other pertinent information.

(b) A description of the redress or other specific action requested with specific references to sections of the act allegedly not complied with.

(4) The director shall issue an order on the hearing in which compliance may be ordered.

(5) Any order of the director under this rule may be appealed to the board of magistrates within 15 days after the order is mailed to the parties. If the order is not appealed within 15 days after mailing, then the order of the director is final. The board of magistrates shall conduct a hearing on the appeal within 60 days of the date of appeal to the board of magistrates.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 65, Eff. Nov. 30, 1970; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.36 Service of papers.

Rule 6. Service of all petitions, papers, notices, and orders shall be in accordance with the following:

(a) Service of all original petitions for hearing under R 408.34(1) shall be by the bureau on each named party to the case at the time service is made.

(b) Service of any subsequent petitions or motions filed on a pending contested case which may alter the parties to a case shall be by the bureau. The bureau shall serve all new parties but may serve only the attorney for each previously named party. Parties not represented by legal counsel shall be served directly. The bureau may request the necessary papers, notices, and postage to be provided by the moving party.

(c) Service of any subsequent petitions or motions filed on a pending contested case which do not alter the parties to a case may be made by the moving party upon the adverse party. The moving party shall only be required to serve the attorney for each previously named party. Any party not represented by legal counsel shall be served directly. The original petition or motion and proof of service shall be filed with the bureau.

(d) Notices mailed by the bureau after service of the original petition for hearing shall be served upon the attorney for each named party. Any party not represented by legal counsel shall be served directly. If the notice requests or requires the appearance or action of a specific party, that party shall also be served.

(e) Decisions or orders issued by the bureau shall be mailed to all parties or may be served personally on the date of hearing. All mailed decisions shall be served from the Lansing office or from such other bureau offices as designated by the director. Upon mailing or personal service, the original order and copies shall show a mailed date or acknowledgement of personal service on their face, from which date the appropriate appeal period shall run. The mailed or personal service date shall be considered the filed date for the order.

(f) Service of all other papers, unless otherwise directed by law, may be made by mail by the moving party upon the adverse party and proof of such mailing shall be prima facie evidence of such service. Proof of such service shall be filed with the bureau.

(g) Service of all papers under this rule upon employers whose liability under the act is not insured according to the records of the bureau, or who have not been granted the privilege of self-insurance, shall be by certified mail with a return receipt requested. Filing of the return receipt shall be prima facie proof of service.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984.

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R 408.37 Rescinded.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.38 Application for advance payment of compensation.

Rule 8. An applicant shall submit an application for advance payment of compensation on form 108. If the carrier, second injury fund, self-insurers' security fund, or silicosis and dust disease fund refuses to approve the application, then the matter shall be set for hearing to determine whether the application should be approved. A carrier, second injury fund, self-insurers' security fund, or silicosis and dust disease fund shall not approve, and a magistrate shall not order an advance payment of compensation to a minor dependent until a legal guardian has been appointed.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1999 MR 4, Eff. May 11, 1999.

R 408.39 Redemptions.

Rule 9. An agreement to redeem the liability of the carrier, second injury fund, self-insurers' security fund, or silicosis and dust disease fund shall be submitted on form 556, agreement to redeem liability. The agreement shall be accompanied by a report, approved by the employee, from a licensed physician stating, in detail, the findings of a recent examination.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1999 MR 4, Eff. May 11, 1999.

R 408.40 Stoppage, reduction, or suspension of compensation.

Rule 10. (1) If compensation is being paid under an order or award of the magistrate or workers' compensation appellate commission, then compensation shall not be discontinued or reduced without a further order or award, except as provided in subrules (3) and (4) of this rule and sections 301(5)(b) and 361(1) of the act. A petition to stop compensation shall include both of the following:

(a) Proof of payment of compensation to within 15 days of the date of the filing of a petition to stop compensation.

(b) An affidavit stating that the employee has returned to gainful employment and substantially describing the nature of the employment, or a signed statement from a physician stating that the employee is able to return to employment.

(2) The bureau shall schedule a hearing within 30 days of receiving a petition to stop compensation, and an order shall be entered under R 408.36.

(3) If a letter that carries a compensation check is returned by the United States post office unopened, and if a diligent search has been made for the party to whom compensation payment is due under the terms of an order or award, then the party liable for payment may suspend payment upon filing an affidavit that the check was returned and a diligent search was made to locate the party. The suspension shall not prejudice the reinstatement of suspended payments.

(4) Upon filing of the report required by R 408.31(6)(d) and notification to an employee, compensation benefits may be reduced in accordance with the act for changes in dependency and age 65 reductions.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.40a Rescinded.

History: 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

Editor's note: Former R 408.40a, pertaining to pre-trial procedure, was rescinded by 1954 ACS 65. For history of the rescinded rule, see 1970-71 AACs.

R 408.40b Appearances at mediation conferences.

Rule 10b. (1) In a contested case, in a hearing district designated by the director, the parties or their attorneys shall appear personally before the bureau at a mediation conference at a date and place scheduled

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by the director. Failure of the petitioner or his or her attorney to appear in a timely manner and participate in a mediation conference may result in the application for mediation or hearing being deemed to have been voluntarily withdrawn under section 205 of the act. Failure of the defendant or its attorney to appear in a timely manner and participate in a mediation conference may subject the defendant to being charged immediately under R 408.35 for noncompliance with the act. A party that fails to appear and participate in a scheduled mediation conference shall obtain the dates for any future mediation conferences or hearings scheduled.

(2) The bureau may require any information from the parties that may be necessary to monitor the progress of the case, assist in the voluntary exchange of information between parties, and facilitate the scheduling of cases.

(3) If the parties agree to compromise the dispute by voluntary payment, the terms of such payment shall be specified on the voluntary payment form signed by both parties and the mediator. If the benefits agreed to are not paid within 30 days of the date the agreement is personally served or mailed by the mediator, then the carrier shall pay to the employee penalties in accordance with section 418.801 of the act.

History: 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.40c Rescinded.

History: 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.40d Rescinded.

History: 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.40e Rescinded.

History: 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.40f Rescinded.

History: 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.40g Rescinded.

History: 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.40h Rescinded.

History: 1979 ACS 3, Eff. Sept. 3, 1980; rescinded 1999 MR 4, Eff. May 11, 1999.

PART 3. INSURANCE

R 408.41b Notice of election to be excluded as employees under act.

Rule 11b. A notice of election to be excluded under section 161(4) of the act shall be reported to the bureau on form 337, notice of exclusion. The employer shall have the notice notarized. If the employer is a partnership or corporation, then the notice shall state the names of all the partners or corporate officers. If the employer is doing business under an assumed name, then the notice shall state the assumed name and each Michigan location covered. The employer shall certify that the employees signing the exclusion comprise all of the employees of the employer. The employer shall further certify that all employees are eligible to be excluded under section 161(2) or (3) of the act. Each employee shall furnish his or her social security number and certify that the employee voluntarily signed the election to be excluded. The employer shall furnish its federal identification number. The employer shall furnish each employee with a copy of the completed exclusion form before filing the form with the bureau. The exclusion shall become effective upon

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receipt of the notice of exclusion by the bureau.

History: 1987 MR 10, Eff. Nov. 4, 1987; 1999 MR 4, Eff. May 11, 1999.

R 408.41c Notice of election to terminate exclusion as employees under act.

Rule 11c. Every notice of election to terminate an exclusion from coverage previously filed under section 161(4) of the act shall be reported to the bureau on form 338, notice to terminate exclusion. The employer shall have the notice notarized. The notice shall state the reason for terminating the exclusion. The notice to terminate exclusion shall certify that all employees and the employer signing the notice to terminate exclusion have received a copy of the completed notice to terminate exclusion before filing the notice with the bureau. The employer shall furnish its federal identification number. The termination of exclusion shall become effective not later than 20 days after the notice to terminate exclusion is received by the bureau. If a carrier is providing coverage at the time the notice to terminate exclusion is filed, or assumes coverage during the 20-day period, then the notice to terminate exclusion shall become effective on the date the carrier assumes coverage.

History: 1987 MR 10, Eff. Nov. 4, 1987; 1999 MR 4, Eff. May 11, 1999.

R 408.42 Application for specific risk insurance policy to cover specified construction site.

Rule 12. An applicant may make written application to the bureau of workers' disability compensation for permission to obtain a specific risk insurance policy to cover all employers on a specified construction site where the cost of construction will be more than \$65,000,000.00 and the contemplated completion period will be 5 years or less. The application shall give sufficient detail to specify the location of the proposed construction site, a breakdown of the total cost, and the contemplated completion period for the construction. After considering the application and all supportive data, the bureau shall either grant approval or advise the owner of the requirements to be met before approval is granted. The applicant shall be given 30 days from the receipt of the bureau's notice in which to comply with the requirements of the bureau. The approval for a specific risk policy is not effective until the bureau has received proof that all requirements of the bureau for issuance of a specific risk policy to cover a specified construction site have been met. The applicant, at the discretion of the director, may be granted additional time to meet the requirements for approval of a specific risk policy. A request for an extension of time shall be made in writing within the 30-day compliance period. If the bureau does not receive proof that all requirements for the approval of a specific risk policy for a specified construction site have been met within the time prescribed, then the application shall be considered withdrawn.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.42a Notice of insurance; specified construction site insurance policy.

Rule 12a. If an insurance policy is issued to cover a specified construction site where the cost of the construction will be more than \$65,000,000.00 and the contemplated completion period will be 5 years or less, then the insurers shall notify the bureau on a form 400a, insurer's notice of issuance of specific risk policy, of the date upon which the employer became subject to the specific insurance policy. If the employer is a partnership, then the notice shall state the names and addresses of all the partners. If the employer is doing business under an assumed name, then the notice shall state the assumed name and the names of the parties doing business under the assumed name. If the employer is a corporation doing business through a number of divisions, then the notice shall state the name of the employer and the divisions that are covered under the specific risk policy. The specific risk carrier shall notify the bureau when the specific risk carrier receives a change of address for the employer.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.42b Termination of insurance; specified construction site insurance policy.

Rule 12b. A notice of termination for coverage of an employer under an insurance policy covering the specified construction where the cost of construction will be more than \$65,000,000.00 and the contemplated completion period will be 5 years or less, shall be reported to the bureau on form 401a, notice of termination of liability for employer under specific risk policy. The insurer shall mail a copy of the notice to the

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employer. If the employer is a partnership, then the notice shall state the names and addresses of all the partners. If the employer is doing business under an assumed name, then the notice shall state the assumed name and the names of all parties doing business under the assumed name. If the employer is a corporation doing business under a number of divisions, then the notice shall state the name of the employer and the divisions of the corporation covered by the termination. If the business changes names, then notice shall be given stating both the new and former names. Notice of termination of a policy which has expired shall not be reported when the specific risk carrier has accepted responsibility under a further or renewal policy, except for an assured's name change. The termination notice shall be filed with the bureau of workers' disability compensation at Lansing, Michigan, not less than 20 days before the effective date of any termination or cancellation of the policy with respect to the employer. The notice shall give the date of termination or cancellation of the contract or policy with respect to the employer. Termination or cancellation of the specific risk policy takes effect, with respect to the employees of the insured employer, 20 days after notice of a proposed termination or cancellation is received by the bureau of workers' disability compensation.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.43 Employer self-insured application; combinable entities.

Rule 13. (1) An employer who applies for the authority to become an individual self-insurer shall apply to the bureau on form 402.

(2) The initial and annual renewal application shall contain answers to all questions, shall include all requested supporting information, as directed, and shall be sworn to by an authorized representative of the employer whose signature is notarized.

(3) Separate legal entities may be self-insured under a single authority if they are majority-owned by the self-insured entity submitting the application or if the same person or group of persons owns a majority interest in each entity on a single application. "Majority interest" of a corporation means ownership of a majority of the voting stock or authority to appoint a majority of directors, if there is no voting stock. "Majority interest" of a partnership means majority partnership interest by the same person or group of persons. "Majority interest" in a limited liability company means majority member ownership by the same person or group of persons.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 65, Eff. Nov. 30, 1970; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.43a Employer individual self-insurer; surety bond or letter of credit; consideration of employer in business less than 5 years; excess liability insurance; required guaranties; claims service companies; self-administered claims.

Rule 13a. (1) A nonpublic self-insurer may be required to furnish a surety bond or letter of credit. The bureau will establish the amount of security at the time of initial application. The bureau shall review the adequacy of security periodically. The bureau shall prescribe the format and language of the bond or letter of credit. The bureau shall accept surety bonds only from a surety writer authorized to transact security bond business in Michigan. A surety bond shall provide for 60 days' notice of cancellation to the bureau. Letters of credit are administered under R 408.43q.

(2) An employer that is in business less than 5 years shall not be considered for self-insured authority unless its workers' disability compensation liability will be guarantied by a parent corporation or combinable affiliated entity that has been in business not less than 5 years and that would qualify for self-insured authority in Michigan.

(3) The bureau shall require specific excess liability insurance, with policy limit and retention acceptable to the bureau, for every self-insured employer, unless the bureau, at its discretion, waives the requirement. The bureau may require aggregate excess liability insurance as a condition of approval for a self-insured employer. Specific and aggregate excess liability insurance policies are accepted under R 408.43k.

(4) Parent corporations shall guaranty all liability incurred by their self-insured subsidiaries under the workers' disability compensation act, unless the bureau, at its discretion, waives the requirement. The bureau shall prescribe the form and substance of the guaranties. The bureau may require employers,

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combinable under a single self-insured authority, to execute workers' disability compensation payment guaranties as a condition for approval of the self-insured authority. The bureau shall prescribe the form and substance of the guaranties.

(5) A self-insurer approved under section 418.611(1)(a) of the act shall contract with a claims service company approved by the bureau under R 408.43m. The bureau may approve a self-insurer to self-administer claims if the employer has reporting capabilities and can demonstrate it has competent, experienced, in-house workers' disability compensation claims personnel.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.43b Employer individual self-insurer; compliance with bureau requirements; notice; additional time; certification; renewal application.

Rule 13b. (1) If the bureau approves an initial application of an employer to be an individual self-insurer, then the approval shall be in writing. The approval letter shall contain the excess liability insurance terms, bond, letter of credit, and guaranties required by the bureau as a condition of the self-insured authority. The employer has 30 days from the receipt of the bureau's notice in which to comply with the requirements of the bureau. The self-insured authority shall not become effective until the bureau has received proof that all requirements of the bureau for self-insured authority have been met.

(2) The employer may, at the discretion of the bureau, be granted additional time to meet the requirements for the self-insured authority. An employer shall make a request for an extension of time in writing within the 30-day compliance period. If the bureau does not receive proof that all requirements for the self-insured authority have been met within the time prescribed, then the application shall be considered withdrawn.

(3) The bureau will issue a letter certifying self-insured authority to the employer when the employer meets the requirements of the bureau. The self-insured authority for all nonpublic employers expires on the designated renewal date, which shall not be more than 12 months from the effective date of the authority. A self-insured employer, excluding a public employer, shall submit a renewal application (form 402R) and requested documents to the bureau 30 days before the expiration of the self-insured authority. Upon receipt of a

renewal application, the authority shall be extended until denied or approved for an additional 12 months. A self-insured authority for a public employer is continuous from the initial approval date until withdrawn by the employer or terminated by the bureau. A public employer shall file a certificate confirming the excess liability insurance policy required as a condition of the self-insured authority as directed by the bureau and provide entity, location, and dba listings, with addresses, when changes occur subsequent to the initial approval. Upon specific request by the bureau, a public employer shall submit financial data, workers' disability compensation loss data or any other data that supports a demonstration of its ability to self-insure its workers' disability compensation exposure. Public employers for the purposes of this subrule are the same as defined in section 418.611(2) of the act.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.43c Financial, loss experience and liability exposure analysis; notice of denial or termination.

Rule 13c. (1) The bureau may decline to approve an application for, or may terminate the self-insured authority if an employer is unable to demonstrate a position of reasonable solvency and the ability to pay benefits as prescribed in the act. The bureau analysis of each nonpublic employer application shall include a review of the employer's financial position and operating results. Standard financial ratio analysis and comparison to similar industry statistical data will be considered in the financial position analysis. Other information relevant to the applicant's financial ability, including but not limited to the following, will be considered:

- (a) The historical operating results.
- (b) Evaluation of financial trends.
- (c) Banking relations.
- (d) Contingent liabilities.
- (e) Pending litigation.
- (f) Corporate guaranties.

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- (g) Management team continuity and experience.
- (h) General and specific industry economic conditions.
- (i) Legal structure.

The bureau's analysis of the employer's loss experience and liability exposure shall include but is not limited to the following:

- (a) Claims for not less than 3 policy years broken down by paid, reserve, and total incurred amounts.
- (b) Number of employees.
- (c) Payroll code classifications.
- (d) Excess liability insurance policy terms will be required and considered in the determination of financial ability.

(2) The bureau shall mail notice of a denial or termination of self-insured authority to the employer. The notice shall include the grounds for denial or termination. The employer may request a hearing in accordance with section 418.611(5) of the act and R 408.43n.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.43k Aggregate excess liability insurance; specific excess liability insurance; individual self-insurer; group self-insurer.

Rule 13k. The bureau shall not recognize a policy of aggregate or specific excess liability insurance in considering the ability of a self-insurer to fulfill its financial obligations under the act, unless the policy is issued by a casualty insurance company authorized, as defined in section 108 of Act No. 218 of the Public Acts of 1956, as amended, being §500.108 of the Michigan Compiled Laws, to transact such business in this state. The policy shall comply with all of the following provisions unless specifically waived by the bureau:

(a) The policy shall not be cancelable or nonrenewable unless written notice, sent by courier, registered mail or certified mail, is given to the other party to the policy and to the bureau not less than 60 days before termination by the party desiring to cancel or not renew the policy.

(b) A policy that has any type of commutation clause shall provide that any commutation effected under the policy shall not relieve the casualty insurance company of further liability with respect to claims and expenses unknown at the time of the commutation or in regard to any claim apparently closed at the time of initial commutation that is subsequently reopened by or through a competent authority. If the casualty insurance company proposes to settle its liability for future payments payable as compensation for accidents occurring during the term of the policy by the payment of a lump sum to the employer, to be fixed as provided in the commutation clause of the policy, then the casualty insurance company or the company's agent shall give the bureau not less than 30 days' prior notice of the commutation. Notice shall be by courier, registered mail or certified mail. If any commutation is affected, then the bureau has the right to direct that the sum be placed in trust for the benefit of the injured employee or employees entitled to future payments of compensation.

(c) The policy shall state that if a private self-insured employer becomes insolvent and is unable to make compensation payments and the self-insurers' security fund may have responsibility for making payment under section 537 of the act, then the excess insurance carrier shall make, directly to the claimants or their authorized representatives, payments as would have been made by the excess insurance carrier to the employer after it has been determined that the retention level has been reached on the excess liability insurance policy.

(d) The policy shall state that 100% of the following payments shall be applied toward reaching the retention level in the specific and aggregate excess liability policy:

- (i) Benefit payments made by the employer as required in the act.
- (ii) Benefit payments, as required in the act, that are due and owing to claimants of the employer.
- (iii) Benefit payments made on behalf of the employer, as required in the act, by a surety under a bond or through the use of other security required by the director.
- (iv) Payments made by the self-insurers' security fund.
- (v) Usual and customary claims allocated loss adjustment expenses.
- (vi) Payments made, as specified in paragraphs (i), (iii), (iv) and (v) of this subdivision, that are reimbursable

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by the specific excess liability policy shall not be considered in reaching the aggregate excess liability retention.

(e) The policy shall provide for 100% reimbursement of the following payments that exceed the retention levels as defined in the specific or aggregate excess liability policy :

(i) Benefit payments made by the employer as required in the act.

(ii) Benefit payments made on behalf of the employer as required in the act by a surety under a bond or through the use of other security required by the bureau.

(iii) Payments made by the self-insurers' security fund.

(iv) Usual and customary claims allocated loss adjustment expenses.

(f) Reimbursement shall be pro rata if multiple excess insurers insure the same self-insured for the same period. A request to waive a provision of this rule shall be in writing and approved by the bureau before a policy is issued. The carrier shall confirm issuance of an aggregate or specific excess liability policy on a form prescribed by the bureau.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; 1989 MR 10, Eff. Nov. 4, 1989; 1996 MR 3, Eff. Mar. 29, 1996; 1999 MR 4, Eff. May 11, 1999.

R 408.43m Servicing self-insured employers or groups; application; requirements; noncompliance.

Rule 13m. (1) An individual, partnership, limited liability company, or corporation that desires to engage in the business of providing 1 or more services for an individual self-insurer or a self-insurers' group shall apply to the bureau before entering into a contract with the individual or group self-insurer and shall satisfy the bureau that it has adequate facilities and competent staff within the state to service a self-insured program in a manner that fulfills the employers' obligations under the act and the rules of the bureau. Service may include claims adjusting, loss control services, underwriting, and the capacity to provide required reporting. Any individual, partnership, limited liability company, or corporation that provides claims adjusting or loss control services to an approved self-insured employer, where the self-insured employer has designated within its own organization an individual to be responsible to the bureau for its claims program or loss control services, or both, shall not be considered a service company for purposes of this rule.

(2) An applicant shall apply to the bureau for approval to act as a servicing company for self-insured employers or group funds on a form prescribed by the bureau. The application shall contain answers to all questions. An applicant shall give the answers under oath. The bureau shall approve the application prior to the service company entering into a contract with an approved self-insurer. Approval to act as a service company for self-insurers is granted for a period of 1 year and is subject to renewal annually.

(3) If a service company seeks approval to service claims for self-insurers, then it shall submit proof that it has, within its organization or under contract on a full-time basis, at least 1 person who has the knowledge and experience necessary to handle claims involving the act. The service company shall attach a resume covering the principal person's background to the application of the service company. The principal individual adjusting workers' compensation claims shall hold a current workers' disability compensation adjuster's license under chapter 12 of Act No. 218 of the Public Acts of 1956, as amended, being §500.1201 et seq. of the Michigan Compiled Laws.

(4) If a service company seeks approval to provide underwriting service to self-insurers, then it shall submit proof that it has, within its organization or under contract on a full-time basis, at least 1 person who has the knowledge and experience necessary to provide underwriting services for workers' compensation excess liability insurance coverage. The service company shall attach a resume detailing the principal person's background to the application of the service company.

(5) If a service company seeks approval to furnish loss control services to self-insurers, then it shall submit proof that it has, within its organization or under contract on a full-time basis, at least 1 person who has the knowledge and background necessary to adequately provide loss control and health services.

(6) A service company shall maintain adequate staff in the state. The service company shall authorize staff to act for the service company on all matters covered by the act and the rules of the bureau.

(7) A service company shall attach to the application a copy of its standard service agreement that it will enter into with self-insured employers or group funds. The service company shall certify, in writing, that the

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service agreement is in compliance with the act and these rules. The service company shall certify, and include a provision in its standard service contract which states, that the contract provides for the handling of all claims with dates of injury or disease within the contract until conclusion of the claims, unless the service company is relieved by the bureau, in writing, of the responsibility for handling claims. If the service contract calls for additional fees for any reason, then the service company shall clearly define the additional fees in the contract. For a service company to be relieved of the responsibility of handling claims to conclusion, the client, the previous service company, and the new service company shall sign a claims transfer agreement. The claims transfer agreement shall be completed on a form prescribed by the bureau and shall include a written request made by the previous service company to be relieved of its claims handling responsibilities to the bureau. A requesting company is relieved of its claims handling responsibility only after receiving a written response from the bureau approving a request. The service company shall certify that it will report to the specific excess insurance carrier or aggregate excess insurance carrier, or both, and put the specific excess insurance carrier or aggregate excess insurance carrier, or both, on notice of all claims as required by the self-insurers' or group self-insurers' insurance policies. The standard service contract filed with the bureau for approval and renewal of the service company authority shall include language specifically stating that the service company is responsible for reporting to the excess insurance carrier. The bureau may waive the reporting requirement upon written request to the bureau. Any dispute involving late reporting of excess liability insurance claims and potential penalties shall be reported to the bureau immediately.

(8) A service company shall certify, and provide for in all service contracts, that all documents generated or prepared by the service company for the group or the individual self-insurer or any materials relating to an individual or group self-insurer held by a service company are the property of the individual or group self-insurer and shall be surrendered to the individual or group self-insurer within 10 days of termination of the service contract, subject to written request by the individual or group self-insurer.

(9) Failure to comply with the provisions of the act constitutes good cause for withdrawal of the approval to act as a service company for self-insurers. The bureau shall give 30 days' notice of withdrawal. The bureau shall give the notice by certified or registered mail, upon all interested parties.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1984 MR 7, Eff. July 19, 1984; 1996 MR 3, Eff. Mar. 29, 1996; 1999 MR 4, Eff. May 11, 1999.

R 408.43n Hearing before director; self-insured status, individual and group fund; group fund rates, membership applications, security requirements, and surplus refunds.

Rule 13n. (1) Upon receiving a notice of intent to deny or terminate self-insured status under section 611 of the act, a party may request a hearing before the director within 15 days of the mailing of the notice by the bureau. Upon receiving a notice denying a request by a group fund for deviation from manual rates, denial of an individual membership application or security requirement, or a denial of a request for a refund of surplus, the group fund may request a hearing before the director within 15 days of the mailing of the notice by the bureau.

(2) The director shall, by certified or registered mail, notify the appealing party of the date, time, place, and reasons for holding the hearing. The director shall mail the notice not less than 15 days before the hearing. If the intent to terminate self-insured status is based on the self-insurer's failure to maintain existing security requirements, then the notice shall advise the self-insurer that proof of reinstatement of the security shall accompany the request for hearing or the director may make a final decision on the termination without further hearing.

(3) If an appearance is made at a hearing, then it shall be made in person by a duly authorized representative or by counsel.

(4) A person who has been served with a notice of hearing may, at his or her option, file a written statement before the date set for hearing or may appear at the hearing and present an oral statement and other evidence on the issues contained in the notice of hearing. When written briefs or arguments are presented, a copy shall be served upon the director and other interested parties not less than 5 days before the date set for the hearing.

(5) If the person or persons who have requested a hearing fail to appear at a noticed hearing, the director may consider the request for a hearing as having been abandoned or, in his or her discretion, may proceed

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with a hearing of the case and may, on the evidence presented, make a decision.

(6) A hearing shall not be adjourned or continued, except upon an order of the director.

History: 1979 ACS 3, Eff. Sept. 3, 1980; 1996 MR 3, Eff. Mar. 29, 1996; 1999 MR 4, Eff. May 11, 1999.

R 408.43q Irrevocable letter of credit; acceptance; requirements; payment of surety bond or letter of credit.

Rule 13q. (1) An irrevocable letter of credit may be accepted by the bureau as other security for a self-insured program as provided by section 611(1)(a) of the act. The bureau will retain discretion in each particular case to determine if the letter of credit is acceptable and if its language and format are satisfactory.

(2) Irrevocable letters of credit shall be issued by or confirmed by a state- chartered Michigan bank or a federally chartered bank with a Michigan branch office. Funds shall be immediately payable on demand. Confirmations shall state that the confirming bank is primarily obligated on the letter of credit.

(3) An employer who elects an irrevocable letter of credit as other security for a self-insured program shall furnish a memorandum of understanding with the letter of credit, on a form provided by the bureau, which affirms the employer's acceptance of all of the following requirements:

(a) A letter of credit is furnished to the bureau instead of a surety bond as one of the requirements for approval of a self-insured program.

(b) The employer understands that the letter of credit shall be deemed automatically extended without amendment for 1 year from the expiry date or any future expiry date unless, 60 days before any expiry date, the bureau is notified, by courier, certified or registered mail, that the letter of credit shall not be renewed for any additional period.

(c) A policy of insurance or a surety bond of equal amount may be furnished at a later date as a substitute for the letter of credit if the policy of insurance or surety bond covers all claims that would have been covered by the letter of credit. All policies of insurance and surety bonds furnished as substitutes for letters of credit are subject to prior bureau approval.

(d) The employer shall affirm that the irrevocable letter of credit in the amount requested by the bureau is being offered with the understanding that if the bureau receives notice that the letter of credit will not be renewed, then the bureau, in its discretion, may, after 30 days from the date of receipt of the notice, call the proceeds of the letter of credit and deposit the proceeds in the state treasury. And further, if, in the judgment of the bureau, the letter of credit is needed to cover any worker's disability compensation claims, then the proceeds of the letter of credit shall be called immediately and deposited in the state treasury for such purpose.

(e) If legal proceedings are initiated by any party with respect to payment of any letter of credit, then it is agreed that the proceedings shall be subject to Michigan courts and law.

(4) The bureau shall not grant an effective date for a self-insured program until a completed letter of credit and the memorandum of understanding have been reviewed and accepted by the bureau.

(5) If it is necessary for the director, under statute and bureau rules, to call the bond or other security, then a trust shall be established with the funds, unless the provider of the bond or other security elects to handle the claims directly and the bureau approves. If a trust is established, the funds shall be deposited in the state treasury and the state treasurer, as provided by section 551(7) of the act, shall be the custodian of the trust. The trustees of the trust shall be the trustees of the funds denominated in chapter 5 of the act and also those who are appointed as trustees under section 511 of the act. The service company of the self-insured employer, if any, shall continue to perform in accordance with the terms of the employer's contract with the service company.

History: 1988 MR 10, Eff. Oct. 27, 1988; 1999 MR 4, Eff. May 11, 1999.

PART 4. MISCELLANEOUS

R 408.44 Attorney fees.

Rule 14. (1) The limitation in this rule as to fees applies to plaintiff's attorneys, including combined

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charges of attorneys who combine their efforts toward the enforcement or collection of any compensation claim.

(2) In a case tried to completion with proofs closed or compensation voluntarily paid, an attorney, before computing the fee, shall deduct from the accrued compensation the reasonable expenses incurred on plaintiff's behalf. The fee that the magistrate may approve shall not be more than 30% of the balance.

(3) In a case involving a redemption of liability, the attorney, before computing the fee, shall deduct the reasonable expenses incurred on plaintiff's behalf from the total settlement. The fee that the magistrate may approve is as follows:

(a) Of the first \$25,000.00, a fee of not more than 15%.

(b) Of any amount more than \$25,000.00, a fee of not more than 10%.

(4) In a case tried to completion with proofs closed but before a final order, after which there is a redemption of liability, the attorney, before computing the fee, shall deduct the reasonable expenses incurred on plaintiff's behalf from the total settlement. The total settlement in such redemptions shall be deemed to include the gross amounts of any partial payments made under section 862 of the act, if the redemption specifically includes a waiver of the right of reimbursement of such amounts from either the plaintiff or the second injury fund. The fee that the magistrate may approve shall not be more than 20% of the balance.

(5) Reasonable expenses, as used in this rule, include all of the following:

(a) Medical examination fee and witness fee.

(b) Any other medical witness fee, including the cost of a subpoena.

(c) The cost of a court reporter service.

(d) Appeal costs.

(6) Subrules (2) to (4) of this rule apply to a case with an injury date on or after September 1, 1965. The rule as to attorney fees in effect before September 1, 1965, applies to a case with an injury date before September 1, 1965.

(7) In a case dismissed for lack of progress or prosecution or in which the petition for hearing is withdrawn for reasons other than voluntary payment or other meritorious reasons and further action is taken by the same attorney or law firm, the fee that the magistrate may approve in cases specified in subrule (2) of this rule shall be not more than 25% of the balance; in subrule (3) of this rule, of the first \$25,000.00, not more than 12-1/2%, and of any amount more than \$25,000.00, 10%; in subrule (4) of this rule, the fee shall be not more than 15% of the balance.

(8) A group disability or hospitalization insurance company that enforces an assignment given to it as provided in the act shall pay a part of the fee of the attorney who secured the compensation recovery in the same proportion that the group insurance company payments bear to the total compensation recovery upon which the attorney's fee is based.

(9) In the computation of attorney fees in a case decided by the workers' compensation appellate commission, the fee shall be assessed on not more than 104 weeks of the period the matter was pending before the commission. All other weekly benefits due and owing for the period of appeal shall be fully paid to the plaintiff. The limitation of fee applies only to weekly compensation.

(10) In a case where benefits are being voluntarily paid at time of redemption, and no application for mediation or hearing is pending, not more than 10% attorney fee will be allowed.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 57, Eff. Feb. 14, 1969; 1954 ACS 65, Eff. Nov. 30, 1970; 1954 ACS 73, Eff. Dec. 2, 1972; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.45 Medical examination and rehabilitation.

Rule 15. (1) A carrier and the self-insurers' security fund shall report to the bureau, on form 110, report on rehabilitation, 3 months after the date of injury and after each subsequent 4 months, what evaluation and what provision has been made for rehabilitation on all cases for which a final form 701, notice of compensation payments, has not been filed. All reports shall be accompanied by a current medical report. In case of a specific loss where the injured employee has returned to work without rehabilitation before expiration of the specific loss period, a notation of the return to work shall be made on form 110, report on rehabilitation, and thereafter further reports shall not be necessary. Where rehabilitation has been undertaken in the form of favored work or on-the-job training by the employer, the rehabilitation shall be so

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identified in all reports.

(2) When an employee consents or is ordered by the bureau to submit to a medical examination or rehabilitation or undergoes any medical treatment related to the disability, the carrier shall pay the traveling expenses incidental to such examination, medical treatment, or rehabilitation. The employee shall notify the carrier, in writing, of the mileage involved and other expenses. When an employee is examined at the request of the carrier under the provisions of section 385 of the act, the expenses incidental to such examination shall be paid in advance. The traveling expenses shall be those authorized in the state standardized travel regulations, except that when special transportation is medically required, payments shall be made at actual cost. The allowance for other expenses, if any, shall be those allowed by this state. The provisions of this rule do not apply to the first examination requested by the employer or insurer if all of the following conditions exist:

(a) An application for hearing is filed upon which no payment of compensation or medical expense has been made for 1 year before the date of filing.

(b) The employee's home at the time of filing the application for hearing is outside of this state.

(c) The citation to appear for examination is at a time reasonably close to the date of hearing so as to obviate the necessity of an additional trip on the part of the employee to attend the hearing.

(3) Under section 319 of the act, the director may, on his or her own motion or upon receipt of an application from the employee or employer, refer the employee for an evaluation of the need for a rehabilitation program and the kind of rehabilitation program necessary to return the employee to work. If a hearing is requested, then all of the following provisions apply:

(a) When a request for rehabilitation service is made by the employee or employer, then the director or his authorized representative may schedule a hearing.

(b) If the director, on his or her own motion, orders a rehabilitation program, then he or she shall notify both parties and, if requested by either party within 15 days, shall schedule a hearing.

(c) A hearing shall be scheduled within a reasonable time, subject to the availability of the director or his or her representative and the parties involved. A request for a hearing shall, at a minimum, contain all of the following:

(i) A brief statement of the question concerning rehabilitation.

(ii) If requested by the employer, a citation of the specific instances of the employee's failure to cooperate in the rehabilitation program.

(iii) If requested by the employee, the type of program requested and the reason for it.

(d) Unless a request for review by a magistrate is filed by a party within 15 days, the order of the director or his or her authorized representative shall stand as the order of the bureau. For sufficient cause shown, the magistrate may grant additional time in which to claim such review.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1979 ACS 3, Eff. Sept. 3, 1980; 1999 MR 4, Eff. May 11, 1999.

R 408.46 Application for silicosis, dust disease, and logging industry compensation fund and second injury fund benefits.

Rule 16. (1) An application for reimbursement of benefits from the silicosis, dust disease and logging industry compensation fund and second injury fund shall be made on form 112 and sent to the principal office of the funds administrator.

(2) A carrier believing that reimbursement may be due from the second injury fund under section 372 of the act shall immediately notify the fund of the potential claim. The fund may then conduct an investigation of the personal injury and shall have reasonable time to schedule medical examinations. If a petition is filed with the bureau, then the carrier shall add the second injury fund and the fund shall have the same rights as any other party defendant. The magistrate shall enter an order determining the liability of the carrier and the fund.

(3) If an employee petitions for a hearing under section 356(1) of the act, then the second injury fund shall be deemed a party in interest and shall be named on the petition filed by the employee or added by the carrier when it has knowledge that a claim is being filed under section 356(1) of the act. The fund shall have the same rights as a carrier in the proceedings.

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(4) Any stipulated order presented for entry which may affect the amount or duration of benefits or which involves a potential liability on any state fund created under chapter 5 of the act shall be presented to the magistrate for entry only after a party provides 10 days' notice of the date of hearing to all parties affected or potentially affected. A party shall file proof of service on the other parties before the hearing date. The magistrate may, at his or her discretion, require the presentment of proofs in support of the stipulation.

(5) Reimbursement shall be made on a quarterly basis for the second injury fund's portion of the benefits due the employee.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 65, Eff. Nov. 30, 1970; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; 1984 MR 7, Eff. July 19, 1984; 1999 MR 4, Eff. May 11, 1999.

R 408.48

Source: 1985 AACS.

PART 5. REVIEW AND APPEAL

R 408.49 Rescinded.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.50 Rescinded.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.51 Rescinded.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

R 408.52 Rescinded.

History: 1954 ACS 21, Eff. Feb. 13, 1960; 1954 ACS 45, Eff. Feb. 14, 1966; 1954 ACS 98, Eff. Jan. 3, 1979; 1979 AC; rescinded 1999 MR 4, Eff. May 11, 1999.

PART 6. DEFINITIONS

R 408.59

Source: 1984 AACS.

SKI AREA SAFETY BOARD

GENERAL RULES

R 408.61 Definitions.

Rule 1. (1) As used in these rules:

(a) "Act" means Act No. 199 of the Public Acts of 1962, as amended, being §408.321 et seq. of the Michigan Compiled Laws.

(b) "Authorized personnel" means a person who is designated and trained by the owner or operator, or both, of the ski area.

(c) "Board" means the ski area safety board created under the act.

(d) "Department" means the department of consumer and industry services.

(e) "Director" means the director of the department or his or her authorized designee.

(2) The terms defined in the act have the same meanings when used in these rules.

(3) As used in ANSI standard B77.1-1999, "authority having jurisdiction" means the director of the department of consumer and industry services.

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History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1993 MR 11, Eff. Dec. 16, 1993; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.65 Adoption of standards by reference.

Rule 5. A person shall construct, install, and operate a ski lift as prescribed in ANSI standard B77.1-1999 entitled "American National Standard for Passenger Ropeways—Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors—Safety Requirements," which is adopted in these rules by reference and may be inspected at the Lansing office of the department. This standard may be purchased from the American National Standards Institute, Inc., Att: Customer Service Department, 11 West 42nd Street, New York, New York 10036, or from the Michigan Department of Consumer and Industry Services, Office of Commercial Services, Ski Area Safety Board, P.O. Box 30018, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$72.00.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1993 MR 11, Eff. Dec. 16, 1993; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.66

Source: 1997 AACs.

R 408.68

Source: 1997 AACs.

R 408.69

Source: 1997 AACs.

R 408.70 Lift machinery; lockout procedures.

Rule 10. (1) All ski lift machinery shall have a disconnect switch which shall be locked in the "off" position before work is performed on the machinery.

(2) The ski area operator shall establish and maintain a written procedure for lockout of the machinery.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.71

Source: 1997 AACs.

R 408.75 Inspection and test of system; requirements for lifts not operated for 30 months.

Rule 15. (1) Before a ski system is opened to the public, qualified personnel and a department inspector shall thoroughly inspect and test the system to assure that the installation of the system is in accordance with the provisions of the act and these rules. The designer or manufacturer shall recommend load test procedures.

(2) A ski area operator shall obtain a load test for chair lifts every 5 years pursuant to the requirements of the department.

(3) A ski area operator shall ensure that a lift that has not operated for 30 consecutive months or longer is in compliance with all of the requirements of this rule and section 12 of the act that are applicable to new lifts before the lift can be approved for public operation.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1993 MR 11, Eff. Dec. 16, 1993; 1999 MR 2, Eff. Aug. 2, 1999.

R 408.76 Wire rope splicing.

Rule 16. A ski area operator shall ensure that there is not more than a single splice in a lift rope unless approved by the department.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

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R 408.77 Replacement of wire rope on emergency basis; repair.

Rule 17. If damage to a wire rope is confined to a single strand, then a ski area operator may replace the damaged strand on an emergency basis. The ski area operator may return the repaired rope to service if all of the following conditions have been satisfied:

- (a) Approval for repairs has been obtained from the director.
- (b) A qualified wire rope splicer verbally advised the director, before the wire rope was returned to service, that a suitable replacement strand was available and it was possible to properly repair the rope using the patch method.
- (c) Documents showing the splice diagrams and overall length of the patch prepared by an approved wire rope splicer have been filed with the department and placed in the ski area operator's wire rope log for the repaired rope.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.78 Splicers; qualifications.

Rule 18. The department shall deem a wire rope splicer to be qualified if he or she meets either of the following requirements:

- (a) Has not less than 5 years of splicing experience and has been observed, by a department inspector, making an acceptable wire rope splice.
- (b) Presents credentials acceptable to the board from a major wire rope company or tramway manufacturer attesting to the individual's qualifications as a wire rope splicer.

History: 1954 ACS 92, Eff. July 21, 1977; 1979 AC; 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.79

Source: 1989 AACs.

R 408.80 Marking of snowmaking devices.

Rule 20. (1) When a ski run, slope, or trail is open to the public, the ski area operator shall mark snowmaking devices as stated in this rule.

(2) A ski area operator shall mark the location of any hydrant, snow gun, or similar fixture or equipment which is used in snowmaking operations located on a ski run and which extends less than 6 feet above the snow surface with a caution sign that has contrasting colors. An orange marking disc, with a minimum diameter of 8 inches, may be used as a caution sign. One sign is adequate for all devices within an area 3 feet on either side of the sign and 10 feet in the downhill direction of the ski run from the sign.

(3) A ski area operator shall place a fiber rope with flags, or mesh tape that is more than 3 inches in height, or a fence where any hose, cord, or similar equipment is laying on a ski run. The ski area operator shall place the fiber rope with flags, mesh tape, or fence between the device and the normal approaching ski traffic. The ski area operator shall place the flags on a fiber rope not more than 10 feet apart.

History: 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.81 Trail marking.

Rule 21. (1) As required by the act, the ski area operator shall mark each ski run, slope, or trail with the appropriate symbol for the degree of difficulty, the degree of difficulty in words, and the name of the run, slope, or trail.

(2) Each ski area operator shall select its most difficult slopes and trails and use the black diamond symbol to identify them and select its easiest slopes and trails and use a green circle symbol to identify them.

(3) Signs for snowboard park entrances shall contain the following wording:

"terrain park entrance-most difficult area, obstacles and hazards exist, proceed at your own risk."

(4) Signs for halfpipe entrances shall contain the following wording:

"halfpipe entrance-most difficult area, obstacles and hazards exist, proceed at your own risk."

(5) Each ski area operator shall mark all slopes and trails not identified as "most difficult" or "easiest" as "more difficult" and shall use a blue square symbol to identify them.

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(6) Each ski area operator shall ensure all of the following:

- (a) Lettering for trail marking signs is a minimum of 2 inches in height.
- (b) Symbols are not less than 6 inches in horizontal and vertical dimension.
- (c) All signs required by the act and these rules are constructed of weather-resistant materials, unless the signs are placed within a weathertight structure.
- (d) All trail marking signs required by this rule are attached to a post, tree, lift tower, or building in a prominent location on or adjacent to the run, slope, or trail being marked.

History: 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.82 Marking of closed runs; “regulatory symbol” defined.

Rule 22. (1) When a ski area is open for skiing and any ski run, slope, or trail is closed to skiing, the ski area operator shall mark the top of, or entrance to, each closed run, slope, or trail with a sign containing a regulatory symbol and the word “closed” in 3-inch or larger letters. The ski area operator shall place a fiber rope with flags, or mesh tape that is more than 3 inches in height, or a fence across the top of, or entrance to, the run, slope, or trail that is closed. The ski area operator shall place the flags on a fiber rope not more than 10 feet apart.

(2) As used in this rule, “regulatory symbol” means a circle or octagon that has contrasting colors around an image of a prohibited activity overlaid with a diagonal line. The ski area operator shall ensure that the inside height and width of the circle or octagon are not less than 6 inches.

History: 1989 MR 4, Eff. May 17, 1989; 1999 MR 7, Eff. Aug. 2, 1999.

R 408.83

Source: 1989 AACs.

R 408.90

Source: 1989 AACs.

R 408.91

Source: 1997 AACs.

R 408.92

Source: 1989 AACs.

R 408.97

Source: 1997 AACs.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF SAFETY AND REGULATION

OCCUPATIONAL HEALTH STANDARDS COMMISSION

MINE SAFETY

Rule 408.121 Rescinded.

History: 1954 ACS 69, Eff. Feb. 7, 1972; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

Rule 408.122 Rescinded.

History: 1954 ACS 69, Eff. Feb. 7, 1972; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

OCCUPATIONAL HEALTH STANDARDS COMMISSION

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ABANDONED AND IDLE MINES

R 408.171 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.172 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.174 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 480.175 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.176 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.177 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.178 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.179 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 408.180 RESCINDED

History: 1954 ACS 74, Eff. Feb. 15, 1973; 1979 AC; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

BUREAU OF SAFETY AND REGULATION
EMPLOYMENT OF MINORS

R 408.201—R 408.206

Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF SAFETY AND REGULATION

OCCUPATIONAL HEALTH STANDARDS COMMISSION

OXYGEN SUPPLY EQUIPMENT

Rule 408.491 Rescinded.

History: 1944 ACS 5; 1954 AC; 1979 AC; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

Rule 408.492 Rescinded.

History: 1944 ACS 5, 1954 AC; 1979 AC; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

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OCCUPATIONAL HEALTH STANDARDS COMMISSION

HEARINGS

R 408.501 Rescinded.

History: 1944 ACS 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

R 408.502 Rescinded.

History: 1944 ACS 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

R 408.503 Rescinded.

History: 1944 AC 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

R 408.504 Rescinded.

History: 1944 ACS 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

R 408.505 Rescinded.

History: 1944 ACS 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

R 408.506 Rescinded.

History: 1944 ACS 36; 1954 AC; 1979 AC; rescinded 2000 MR 11, Eff. Aug. 7, 2000.

BUREAU OF EMPLOYMENT STANDARDS

GENERAL RULES

PART 1. GENERAL PROVISIONS

R 408.701 Definitions.

Rule 1. As used in these rules:

- (a) "Act" means Act No. 154 of the Public Acts of 1964, as amended, being §408.381 et seq. of the Michigan Compiled Laws.
- (b) "Administrative Capacity" means an employee who is compensated on a salary basis at not less than \$250.00 per week and whose primary duty is nonmanual work directly related to the administration of an educational institution.
- (c) "Commission" means all earnings of an employee, in addition to the hourly rate of pay, which the employee has been led to expect on a regular basis as a result of an employment contract, agreement, or promise.
- (d) "Compensatory Time" means paid time off earned at 1½ times the regular hours worked in excess of 40 hours in a week and paid at some future time.
- (e) "Executive Capacity" means an employee to whom all of the following provisions apply:
 - (i) Compensation is on a salary basis at not less than \$250.00 per week.
 - (ii) The employee's primary duty is management.
 - (iii) The employee supervises 2 or more employees.
- (f) "Fee" means a fixed amount for a service provided or job completed regardless of time required for completion.
- (g) "Paid Time Off" means compensation for time off paid to the employee for vacation, personal time, or sick time.
- (h) "Professional Employee" means an employee who is compensated on a salary basis at no less than \$250.00 per week and whose primary duty is any of the following:
 - (i) Work in a field of science or learning that requires knowledge acquired by a prolonged course of specialized instruction.

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- (ii) Work in a recognized field of artistic endeavor that depends upon the talent of the employee.
 - (iii) Work in an educational institution as a teacher, tutor, instructor, or lecturer.
 - (i) "Salary" means payment of a fixed amount not subject to reduction because of variations in the quantity or quality of work performed.
 - (j) "Workweek," as applied to an employee, means a fixed and regular recurring period of 168 hours or 7 consecutive 24-hour periods. Workweek need not coincide with the calendar week, but may begin on any day and at any hour of the day. For purposes of computing overtime pay, a single workweek may be established for 1 employee or different workweeks may be established for different employees or groups of employees.
- History: 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 66, Eff. July 1, 1971; 1979 AC; 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.702 Records.

Rule 2. (1) An employer shall keep employment records for each employee showing all of the following:

- (a) Name.
 - (b) Home address.
 - (c) Date of birth.
 - (d) Occupation in which employed.
 - (e) Total daily hours worked, showing the starting and ending times each day, computed to the nearest tenth of an hour, or other finer measure.
 - (f) Total hours worked in each pay period.
 - (g) Total hours worked in each work period when the work period does not coincide with the pay period.
 - (h) Total hourly, daily, or weekly basic wage.
 - (i) Total wages paid each pay period.
 - (j) Itemization of all deductions made each pay period.
 - (k) Itemization of tips received in each pay period.
- (2) An employer shall keep records for employees paid on a piecework basis to indicate pieces produced.
- (3) If a credit is taken for gratuities received by an employee, then the employment records shall contain for each pay period in which the credit was taken a written statement of the amount of gratuities received by the employee. The statement shall be signed by the employee and dated before the date the paycheck was received.
- (4) Records required under this rule shall be preserved by the employer for not less than 3 years.
- History: 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 50, Eff. May 15, 1967; 1954 ACS 66, Eff. July 1, 1971; 1979 AC; 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.703 Rescinded.

History: 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 50, Eff. May 15, 1967; 1954 ACS 66, Eff. July 1, 1971; 1954 ACS 86, Eff. Jan. 3, 1976; 1979 AC; 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.704 Rescinded.

History: 1954 ACS 48, Eff. Nov. 14, 1966; 1954 ACS 50, Eff. May 15, 1967; 1954 ACS 66, Eff. July 1, 1971; 1979 AC; 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.705 Rescinded.

History: 1954 ACS 50, Eff. May 15, 1967; 1979 AC; 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.706 Complaint; filing date; time limitation.

Rule 6. (1) A complaint shall be considered filed with the department as of the date it is received by the department.

(2) A claim must be filed with the department within 3 years of the date of the alleged violation.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

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PART 2. OVERTIME COMPENSATION

R 408.721 Determining workweek for overtime compensation.

Rule 21. (1) An employer shall establish an employee's workweek and shall indicate the beginning time and day of the workweek in the employment record for the employee.

(2) Once the beginning time of an employee's workweek is established, it remains fixed and may be changed only if the change is intended to be permanent and is not designed to evade the overtime requirements of the act.

(3) Each workweek stands alone. Averaging of hours over 2 or more weeks is prohibited, regardless of whether the employee works on a standard or swing shift schedule and regardless of whether the employee is paid on an hourly, daily, weekly, biweekly, monthly, piecework, commission or other basis, except as otherwise provided by law.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.722 Work period.

Rule 22. (1) An employer shall establish an employee's work period and shall indicate the beginning and ending time and date of the work period in the employment record for the employee.

(2) The work period need not coincide with the pay period.

(3) The beginning and ending date of a work period shall not be changed, regardless of the number of hours worked within the period, unless the change is intended to be permanent and is not designed to evade the overtime requirements of the act.

(4) An employer may have different work periods for different employees.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.723 Computing regular rate of pay for overtime compensation.

Rule 23. (1) If an employee is paid on an hourly rate plus commission or salary plus commission, then the salary and commission shall be considered as gross earnings for the workweek, and the regular rate is obtained by dividing the sum by the number of hours for which the salary was paid. (2) If an employee is paid on a piece-rate basis, then the regular rate of pay is computed by adding together the total earnings of the workweek from piece rates and all other earnings and any sums paid for other hours worked. This sum total is divided by the number of hours worked in that week to yield the pieceworker's regular rate for that week.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.724 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.725 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.726 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.727 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.728 Amusement and recreational establishments exempt from overtime provisions.

Rule 28. (1) An employer's business shall be considered an amusement or recreational establishment if it complies with all of the following provisions:

(a) It is open for the general public at a fixed site.

(b) It is open primarily to provide leisure activities for those who attend.

(c) It does not operate for more than 7 months in a calendar year.

(2) A grocery store, restaurant, motel, curio, souvenir shop, or any other retail and service establishment is

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not considered an amusement or recreational establishment unless it is so related to an amusement or recreational establishment that it could not, in a reasonable manner, offer its services to the general public independently, and is not open to the general public beyond the months the amusement or recreational establishment to which it is related is open.

(3) The exempt status of an amusement or recreational establishment and a grocery store, restaurant, motel, curio, souvenir shop, or other retail and service establishment operated under the same ownership shall be determined separately for each establishment.

(4) If an amusement or recreational establishment operates at widely separated fixed locations, the exempt status of each fixed location shall be determined separately.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.729 Employees of an amusement or recreational establishment.

Rule 29. (1) Employees of a central office or warehouse or office which services an amusement or recreational establishment shall not be considered employed by the amusement or recreational establishment. (2) An employee whose duties are divided between working for an amusement or recreational establishment and a nonexempt business owned by the same employer shall not be exempt from the overtime provisions of the act for any workweek in which work performed at the nonexempt business exceeds 20% of the hours worked.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.730 Employment in agriculture.

Rule 30. (1) An employee shall not be considered employed in agriculture for any workweek in which nonagricultural work exceeds 20% of the hours worked in the workweek.

(2) An employee of an establishment which produces agricultural commodities and sells such commodities to the general public shall not be considered employed in agriculture, regardless of his or her duties, if more than 50% of the gross income of the establishment results from sales to the general public.

History: 1979 ACS 8, Eff. Dec. 2, 1981; 2000 MR 1, Eff. Feb. 1, 2000.

R 408.733 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.731, R 408.732

Source: 1997 AACS.

R 408.733 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.734 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

R 408.735 Rescinded.

History: 1979 ACS 8, Eff. Dec. 2, 1981; rescinded 2000 MR 1, Eff. Feb. 1, 2000.

DIRECTOR OF LABOR AND WAGE DEVIATION BOARD
CERTIFICATES FOR SHELTERED WORKSHOPS AND
EMPLOYMENT OF HANDICAPPED WORKERS

R 408.751—R 408.767

Source: 1997 AACS.

BUREAU OF EMPLOYMENT STANDARDS
WAGE DEVIATION

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R 408.771
Source: 1983 AACS.

R 408.772
Source: 1983 AACS.

R 408.773
Source: 1983 AACS.

R 408.774
Source: 1983 AACS.

R 408.775
Source: 1983 AACS.

R 408.776
Source: 1983 AACS.

R 408.777
Source: 1983 AACS.

R 408.778
Source: 1983 AACS.

R 408.779
Source: 1983 AACS.

R 408.780
Source: 1983 AACS.

R 408.781
Source: 1983 AACS.

R 408.782
Source: 1983 AACS.

R 408.783
Source: 1983 AACS.

R 408.784
Source: 1983 AACS.

R 408.785
Source: 1983 AACS.

R 408.786
Source: 1983 AACS.

R 408.787
Source: 1983 AACS.

DIRECTOR'S OFFICE
CARNIVAL AND AMUSEMENT RIDES
PART 1. GENERAL PROVISIONS

R 408.801

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Source: 1983 AACS.

R 408.802

Source: 1983 AACS.

R 408.803

Source: 1983 AACS.

R 408.805

Source: 1997 AACS.

R 408.806

Source: 1983 AACS.

R 408.807

Source: 1997 AACS.

R 408.809

Source: 1997 AACS.

R 408.811

Source: 1997 AACS.

R 408.813

Source: 1983 AACS.

R 408.814

Source: 1996 AACS.

R 408.815—R 408.817

Source: 1997 AACS.

R 408.819

Source: 1983 AACS.

PART 2. DESIGN, CONSTRUCTION, AND OPERATION

R 408.821

Source: 1983 AACS.

R 408.822

Source: 1997 AACS.

R 408.824

Source: 1983 AACS.

R 408.825

Source: 1983 AACS.

R 408.826

Source: 1983 AACS.

R 408.827

Source: 1983 AACS.

R 408.828

Source: 1983 AACS.

R 408.829

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Source: 1983 AACS.

R 408.830

Source: 1983 AACS.

R 408.831

Source: 1983 AACS.

R 408.832

Source: 1983 AACS.

R 408.833

Source: 1983 AACS.

R 408.835

Source: 1983 AACS.

R 408.837

Source: 1983 AACS.

R 408.839

Source: 1996 AACS.

R 408.839a

Source: 1996 AACS.

R 408.841

Source: 1983 AACS.

R 408.843

Source: 1983 AACS.

R 408.844

Source: 1983 AACS.

R 408.846

Source: 1983 AACS.

R 408.848

Source: 1996 AACS.

R 408.849

Source: 1983 AACS.

R 408.851

Source: 1983 AACS.

R 408.852

Source: 1983 AACS.

R 408.854

Source: 1983 AACS.

R 408.856

Source: 1983 AACS.

PART 3. PROCEDURES

R 408.871

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Source: 1983 AACS.

R 408.872

Source: 1983 AACS.

R 408.873

Source: 1983 AACS.

R 408.874

Source: 1983 AACS.

PART 4. PARTICIPATORY RIDES—GO-KARTS

R 408.891a Definitions.

Rule 91a. As used in this part:

- (a) "Go-kart" means a powered, wheeled vehicle that is driven by a person who controls the speed, braking, and direction of a vehicle on a designated track.
- (b) "Go-kart driver" means the person who is in control of the speed, direction, and braking of the go-kart.
- (c) "Go-kart ride" means an amusement ride consisting of a designated track and the go-karts approved to operate on the track.
- (d) "Go-kart rider" means the person or passenger who is accompanying the go-kart driver and who is in a separate seat.
- (e) "Go-kart ride attendant" means an individual employed by the go-kart track facility to properly fuel go-karts, educate the patron on safe go-kart riding, and verify go-kart driver and go-kart rider security and safety before, and until completion of, the go-kart ride.
- (f) "Remote idle system" means a braking system used as a safety device by a go karts ride attendant to reduce or disable engine power of a go-kart.

History: 1993 MR 3, Eff. Mar. 24, 1999.

R 408.893 Manufacturer recommendations; repair records; go-kart construction; protection against damage; signs; throttle and brake locations; maximum speeds; protective cover; driver and rider restraints.

Rule 93. (1) Owner-operators shall follow manufacturer recommendations for maintenance, operational safety standards, and performance criteria as related to inspections of the go-kart ride.

(2) Go-kart ride managers or owner-operators shall maintain written repair records for each go-kart. Repair records shall be made available to the department upon request.

(3) Rules pertaining to the design and manufacture of go-kart rides apply to go-karts manufactured, and tracks developed, on or after the effective date of these rules. If the design review of an installation was submitted before the effective date of these rules then the installation need not comply with these rules.

(4) The rules pertaining to inspection, maintenance, and operational safety standards of go-kart rides shall apply to all go-kart operations as of the effective date of these rules.

(5) Go-karts shall be constructed so that the wheels from one go-kart cannot engage or override the wheels of another go-kart when operating in wheel to wheel competition or with other go-karts in operation on the track.

(6) Go-karts shall be equipped with a fuel storage tank system that will not leak more than ½ ounce of fuel over a 5-minute period from the fuel storage system when the go-kart is turned on either side or upside down. A go-kart shall be equipped with protection against damage due to a collision with another go-kart or track obstacle.

(7) Signs stating "no bumping" or similar wording shall be posted on the rear of all go-karts and shall be included on all go-kart rider rules and instructions signs.

(8) Throttle and brake locations on go-karts shall be clearly identified by painting or otherwise coloring the throttle controls green (go) and brake controls red (stop).

(9) Maximum speeds for go-karts shall be based on manufacturer and track designer recommendations.

(10) Go-karts shall have a protective cover over moving or heated parts of the engine and drivetrain system

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to prevent accidental occupant contact with the components. The body of the go-kart may serve as a protective cover.

(11) Go-karts shall have go-kart driver and go-kart rider restraints and rollover protection.

History: 1999 MR 3, Eff. Mar. 24, 1999.

R 408.895 Barrier/rail system; open area track; surfaces; tires; intersections; fire extinguishers; patron entrance; fueling facilities; go-kart direction; pit lanes.

Rule 95. (1) Go-kart tracks shall have a barrier/rail system which meets or exceeds manufacturer recommendation and which confines the operations of the go-kart to a defined area.

(2) In an open area track, or grand prix-type track, only 1 go-kart may be operated by 1 go-kart driver in a solo race against the clock. A grassy area is acceptable in place of a barrier/rail system.

(3) Go-kart track surfaces shall be constructed of solid, hard-surface materials and maintained in good repair and free of debris.

(4) Tires used for a barrier system shall consist of automotive-type tires, shall be free of rims or wheels, and shall be securely fastened to each other or anchored, or both. Spinner tires used in pit areas for entry safety spinners shall be mounted on rims and installed on a rigid spindle.

(5) To avoid either side or head-on collisions, there shall be no intersections in the go-kart track that enable go-karts to cross one another's paths in any direction on the same track level.

(6) A minimum of a 20 pound A/B/C-rated fire extinguisher shall be located in the pit area. There shall be a minimum of 3 other fire extinguishers on the premises. One of the fire extinguishers shall be located within 70 feet of any point of the go-kart track and facilities.

(7) The patron entrance to and exit from go-kart track pit areas shall be fenced and controlled by gates equipped with a self-closing and self-latching mechanism.

(8) Fueling facilities for a go-kart ride shall be in compliance with all applicable local, state, and national regulations regarding the fueling facilities.

(9) Markings or signs indicating the direction of go-kart travel and identifying pit lanes shall be clearly visible to go-kart drivers.

History: 1999 MR 3, Eff. Mar. 24, 1999.

R 408.897 Remote idle system; employee training; fueling; hazardous situation signals; driver instruction; passenger age restrictions; smoking prohibited; use of restraints; night illumination.

Rule 97. (1) Effective May 1, 2000, each go-kart shall be equipped with a receiver for a remote idle system. A go-kart ride attendant shall control the remote idle system.

(2) If the remote idle system becomes inoperable and requires repair, then the track owner-operator shall make a written request to operate the go-kart rides until the repair is completed. The duration of the repair period shall not be more than 30 days.

(3) Go-kart ride attendants shall receive training in all of the following areas:

(a) Basic emergency handling.

(b) Basic fire suppression equipment.

(c) Fueling.

(d) The operation of the remote idle system.

(4) A person shall not be in a go-kart during fueling. A go-kart's engine shall be turned off during fueling or refueling.

(5) Go-kart fueling operations shall be performed a minimum of 10 feet from any person not directly involved in the procedure.

(6) Go-kart fueling shall be performed in a manner consistent with local, state, and national fire codes and industry standards.

(7) Go-kart safety and fueling procedures shall be set out in written form by the owner-operator and signed by each go-kart ride attendant in accordance with manufacturer recommendations and industry practices.

(8) A go-kart special inspector shall conduct a daily pre-opening inspection of the go-karts, pit area, and go-kart track facilities in accordance with manufacturer and go-kart track designer recommendations.

(9) Go-kart ride attendants shall be positioned to reach any part of the go-kart track within 20 seconds.

(10) A go-kart ride attendant shall see all portions of the go-kart track with an unobstructed view. If the

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entire go-kart track is not visible to a go-kart ride attendant, then some form of 2-way communication shall be provided to go-kart ride attendants, to permit monitoring of the entire track and to ensure go-kart ride safety.

(11) A go-kart ride attendant shall verify that all go-kart driver and go-kart rider restraints are properly secured before the go-kart ride starts.

(12) Audio and visual directives shall be provided to signal go-kart drivers of hazardous situations.

(13) A go-kart ride attendant shall not allow a person who appears to be under the influence of an intoxicant to participate in a go-kart ride.

(14) Instructions shall be given to each go-kart driver and go-kart rider about go-kart ride safety rules. The instructions shall clearly identify the fuel and brake activator controls and shall include the operation of the remote idle system.

(15) A go-kart rider in a 2-seat go-kart shall be accompanied by a go-kart driver who is a minimum of 16 years of age.

(16) A track owner-operator shall ensure that go-kart drivers and riders do not smoke while operating a go-kart and shall ensure that no one smokes while in the pit or fueling area of a go-kart track.

(17) Go-kart ride attendants shall be clearly identifiable by patrons.

(18) All go-kart riders in multiple-rider go-karts shall occupy separate seat positions, side by side, and use separate restraints. Children not able to ride independently in a separate seat and separate restraint shall not be permitted to ride.

(19) A go-kart track that operates at night shall be lighted so that the go-kart driver, go-kart rider, and go-kart ride attendant can see the go-kart track.

History: 1999 MR 3, Eff. Mar. 24, 1999.

BOILERS

PART 1. GENERAL PROVISIONS

R 408.4011 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 73, Eff. Nov. 4, 1972; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4012 Definitions.

Rule 12. (1) "Accident" means a sudden and accidental breakdown of a boiler or a part of a boiler that results in physical damage to the boiler which necessitates the repair or replacement of the boiler or a part of the boiler. "Accident" does not mean a breakdown due to any of the following unless a unique or unusual explosion hazard exists as a result of the breakdown:

(a) Normal erosion.

(b) Corrosion.

(c) Wastage of metal that requires restoration.

(d) Leaking tubes.

(e) Weakened metal, such as water legs or handhole areas.

(2) "Act" means Act No. 290 of the Public Acts of 1965, as amended, being §408.751 et seq. of the Michigan Compiled Laws.

(3) "Aftercooler" means a device used for lowering the temperature of a boiler blowoff discharge before it enters the building drain.

(4) "Alteration" means any change in the item described on the original manufacturer's data report that affects the pressure-containing capability of the boiler or its piping. A nonphysical change such as an increase in the maximum allowable working pressure (internal or external) or design temperature of a boiler or its piping is an alteration.

(5) "ASME" boiler and pressure vessel code," "ASME code," or "code" means the boiler and pressure vessel code of the American Society of Mechanical Engineers, with addenda, as prescribed and approved by the

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council of the society.

(6) "Authorized inspector" means an individual who is designated as an authorized inspector by an authorized inspection agency, who holds a valid certificate of competency and national board commission with an "A" or "B" endorsement, and who is employed by the authorized inspection agency that assumes responsibility for the individual's actions.

(7) "Blowoff valve" means a valve connected to the boiler for the purpose of reducing the concentration.

(8) "Board of boiler rules" or "board" means the board created by the act.

(9) "Boiler assembler" means a corporation, company, partnership, or individual who assembles a boiler that has been delivered in pieces. For ASME code section I power boiler assemblies, a boiler assembler shall possess the appropriate code symbol stamps.

(10) "Boiler blowoff piping" means the piping, fittings, and valves from the boiler to the blowoff tank, blowoff separator, or other safe point of discharge through which the water in the boiler may be blown out under pressure, except for drains such as those used in water columns, gauge glasses, or piping to feed water regulators and similar devices.

(11) "Boiler blowoff tank/separator" means an unfired pressure vessel into which water is discharged above atmospheric pressure from a boiler blowoff line.

(12) "Boiler installation" means the installation of a boiler, including all connected piping, valves, fittings, flanges, firing equipment, controls, appurtenances, and auxiliaries. The term includes the field assembly of boilers.

(13) "Certificate of competency" means a certificate issued to a person who has passed an examination for inspectors prescribed by the board of boiler rules.

(14) "Chief inspector" means the chief boiler inspector appointed under the act.

(15) "Condemned boiler" means a boiler that has been inspected and declared unsafe or rejected for use by an inspector who is qualified to take such action and who has applied a stamping or marking designating its rejection.

(16) "Deputy inspector" means an inspector who holds a license and who is appointed by the director under the act.

(17) "Existing installation" means and includes any steam boiler constructed, installed, placed in operation, or contracted for before August 10, 1917, or any hot water heating or supply boiler constructed, installed, placed in operation, or contracted for before the effective date of these rules.

(18) "External inspection" means an inspection which is conducted while the boiler is under pressure and which does not involve examination of the internal surfaces of the pressure parts of the boiler.

(19) "Field assembly" means assembling prefabricated boiler pressure parts without field welding or riveting.

(20) "Field erection" means the erecting and assembling of boiler parts by welding, riveting, or other fabrication processes.

(21) "Flash tank" means a closed vessel equipped with internal baffles or an apparatus for the purpose of separating moisture from flash steam as it passes through the vessel.

(22) "Hobby" means an interest or activity that a person pursues in his or her leisure time without compensation.

(23) "Hot water heating and hot water supply boiler" means a boiler that operates at pressures of not more than 160 psi or temperatures of not more than 250 degrees Fahrenheit, at or near the boiler outlet.

(24) "Inspector" means an individual who holds a valid certificate of competency and national board commission.

(25) "Internal furnace" means a furnace in a boiler consisting of a straight or corrugated flue.

(26) "Internal inspection" means an inspection made when a boiler is shut down and handholes or manholes are opened for inspection of the interior.

(27) "Internally fired boiler" means a fire tube boiler that has an internal plate-type, water-cooled furnace.

(28) "Licensed boiler installer" means a person who is engaged in the business of making piping connections to a boiler or a person who is engaged in the business of field-assembling boilers.

(29) "Licensed boiler repairer" means a person engaged in making or supervising all phases of boiler repair, alteration, or field erection.

(30) "Michigan special" means a boiler that is not built in compliance with the code. A boiler is a noncode

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boiler if it is not stamped with the ASME code symbol stamp.

(31) "Miniature boiler" means a power boiler that does not have any of the following:

- (a) An inside diameter of the shell of more than 16 inches.
- (b) A working pressure of more than 100 psig.
- (c) A gross volume of more than 5 cubic feet.
- (d) More than 20 square feet of heating surface.

(32) "New boiler" means a boiler constructed, installed, placed in operation, or contracted for after July 1, 1966.

(33) "Nonstandard boiler" means a boiler that does not bear the national board stamping or the stamp of any state or political subdivision which has adopted a standard of construction equivalent to that required by the board of boiler rules.

(34) "Owner or user" means a person, firm, partnership, or corporation that owns or operates a boiler within this state.

(35) "Portable boiler" means a boiler which is primarily intended for temporary location and which is, by its construction and usage, obviously portable.

(36) "Reinstalled boiler" means a boiler which is removed from its original setting and which is reinstalled at the same location or reinstalled at a new location without ownership of the boiler changing.

(37) "Rental boiler" means a boiler which is in temporary use for not more than 1 year and which may or may not be installed inside a boiler room, temporary room, or temporary shed or without external covering.

(38) "Repair" means the work necessary to restore a boiler or its piping to a safe and satisfactory operating condition.

(39) "Safe point of discharge" means a point of discharge that will protect personnel and property from injury due to discharge.

(40) "Special inspector" means an inspector who holds a license and who is regularly employed by an insurance company authorized to insure against a loss from boiler accidents in this state or means any city that has an authorized boiler inspection department.

(41) "Standard boiler" means a boiler that bears the stamp of the national board of boiler and pressure vessel inspectors or of another state or political subdivision which has adopted a standard of construction equivalent to that required by the board of boiler rules of this state.

(42) "Traction boiler" means a boiler designed for the express purpose of pulling farm equipment or to convert steam power into flywheel energy driving farm apparatus such as threshers, saws, or grinding equipment.

(43) "Water heater" means a heater for use in commercial or industrial sizes providing corrosion resistance for supplying potable hot water at pressures not exceeding 160 psi and/or temperatures not exceeding 210 degrees Fahrenheit. A water heater that does not exceed any one of the following is exempt from these rules:

- (a) A Heat input of more than 200,000 BTU per hour.
- (b) A Water temperature of more than 210 degrees Fahrenheit.
- (c) A nominal water-containing capacity of more than 120 gallons.

History: 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4013 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS 68, Eff. June 3, 1971; 1954 ACS 98, Eff. Jan. 24, 1979; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4015 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 68, Eff. June 3, 1971; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4017 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 68, Eff. June 3, 1971; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

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R 408.4019 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4021 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 61, Eff. Feb. 16, 1970; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4023 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 67, Eff. Mar. 31, 1971; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4024 Adoption of national board inspection code (NBIC) by reference.

Rule 24. (1) The owner shall ensure the inspection, repair, and alteration of boilers and piping is in accordance with the national board inspection code, 1998 edition, and its addenda, except as modified by these rules. The national board inspection code is adopted by reference in these rules and may be reviewed at the Okemos office of the Department of Consumer and Industry Services, Bureau of Construction Codes, Boiler Division. The code may be purchased from the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, or from the Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$70.00 each.

(2) The accreditation programs described in the NBIC are not mandatory but are accepted for use in the state; however, all boiler repairers shall obtain a license from the boiler division of the department of consumer and industry services.

(3) Where the text of the NBIC refers to the "certificate holder," the reference shall apply to all licensed boiler repairers, except when the reference is in relation to completion of NBIC forms and NBIC stamping. A licensed repairer is not required to apply the national board "R" symbol stamp to repair and alteration nameplates.

(4) The standard welding procedures referenced in the NBIC are accepted for use in this state, but are not mandatory. A licensed boiler repairer who elects to use 1 or more of the standard welding procedures may, in place of the filing requirement in R 408.4631, file a list of the standard welding procedure identification numbers with the boiler division, of the department of consumer and industry services before conducting any repairs or alterations requiring welding.

History: 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4025 ASME code; adoption by reference.

Rule 25. (1) A boiler shall be constructed as prescribed by these rules and the ASME boiler and pressure vessel code, 1998 edition, and its addenda. Sections I, II, III, IV, V, VIII, IX, and XI of the code and addenda are adopted by reference in these rules and may be reviewed at the Okemos office of the Department of Consumer and Industry Services, Bureau of Construction Codes, Boiler Division, 2501 Woodlake Circle, Okemos, Michigan 48864. The code may be purchased at a cost as of the time of adoption of these rules of \$6,550.00 from the ASME International, 22 Law Drive, Fairfield, New Jersey 07007, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864.

(2) The board may accept pressure-retaining items which have been constructed to standards other than ASME standards and which have been accepted by application of the national board of boiler and pressure vessel inspectors criteria for registration procedure.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 68, Eff. June 3, 1971; 1954 ACS 73, Eff. Nov. 4, 1972; 1954 ACS 86, Eff. Jan. 16, 1976; 1954 ACS 98, Eff. Jan. 24, 1979; 1979 AC; 1985 MR 2, Eff. Mar. 7, 1985; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4026 Inspection and stamping during construction.

Rule 26. (1) An authorized inspector who is licensed to inspect boilers in this state shall, during

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construction, inspect all boilers, other than cast iron sectional boilers, to be installed in this state, as required by the applicable rules of the board of boiler rules. If a boiler is constructed outside of this state, an authorized inspector who holds a license as an inspector of boilers for a state that has a standard of examination substantially equal to that of this state as provided for in R 408.4071 or who holds a commission issued by the national board of boiler and pressure vessel inspectors shall inspect the boiler.

(2) The manufacturer shall register a boiler, other than a cast iron sectional boiler built or constructed for use in this state after the effective date of these rules, with the national board of boiler and pressure vessel inspectors.

History: 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4027 Adoption; ASME code CSD-1.

Rule 27 (1) The owner shall ensure that the assembly, maintenance, operation, and testing of controls and safety devices is in accordance with ASME code CSD-1, 1998 edition, and its addenda, except as modified by these rules. The code and addenda are adopted by reference in these rules and may be reviewed at the Okemos office of the Department of Consumer and Industry Services, Bureau of Construction Codes, Boiler Division, 2501 Woodlake Circle, Okemos, Michigan 48864. The code may be purchased at a cost as of the time of adoption of these rules of \$52.00 from the American Society of Mechanical Engineers, 22 Law Drive, Fairfield, New Jersey 07007, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864.

(2) An owner or user of an automatic boiler system shall ensure that the testing of controls and safety devices is conducted in accordance with the following minimum requirements:

Item	Frequency	Personnel	Remarks
Burner/combustion controls	Annual	Service Technician	Manufacturer's Instruction
Low water fuel cutoff	Monthly	User/Operator	Slow drain test until boiler shuts down (SEE NOTE 1)
High/operating safety limits	Annual	Service Technician	Manufacturer's Instruction
Safety valves	Monthly low pressure/annual high pressure	User/Operator	Manually with 75% of set pressure on boiler, or tested by manufacturer's representative

Note 1: An alternate test may be conducted on hot water heating boilers if acceptable to the inspector.

(3) An owner or user of an automatic boiler system shall ensure that testing is conducted in accordance with the manufacturer's instruction. Personnel who conduct the testing are not required to be licensed under the

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act. The owner or user shall provide the inspector, at the time of certificate inspection, with evidence showing what tests have been completed. The inspector may require additional testing if deemed necessary.

History: 1995 MR 4, Eff. Apr. 21, 1995, 1999 MR 12, Eff. Jan. 4, 2000.

Editor's note: The R number for this rule has been reassigned. Former R 408.4027 was rescinded effective June 3, 1971.

R 408.4028

Source: 1995 AACS.

R 408.4031 Installation and reinstallation of boilers.

Rule 31. The owner shall ensure the installation of a new boiler or a reinstalled boiler, is installed in accordance with the requirements of these rules and the ASME boiler and pressure vessel code, 1998 edition, which is adopted by reference in R 408.4025.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 73, Eff. Nov. 4, 1972; 1954 ACS 86, Eff. Jan. 16, 1976; 1954 ACS 98, Eff. Jan. 24, 1979; 1979 AC; 1985 MR 2, Eff. Mar. 7, 1985; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4032 Non-boiler external piping; power boilers; adoption of standards by reference.

Rule 32. (1) The owner shall ensure that the installation of piping not covered by the ASME boiler and pressure vessel code, section I, 1998 edition, is installed as prescribed by the ASME code for pressure piping, B31.1, 1998 edition. The code for pressure piping is adopted by reference in these rules and may be reviewed at the Okemos office of the Department of Consumer and Industry Services, Bureau of Construction Codes, Boiler Division, 2501 Woodlake Circle, Okemos, Michigan 48864. The code may be purchased at a cost as of the time of adoption of these rules of \$164.00 from the ASME International, 22 Law Drive, Fairfield, New Jersey 07007, or from the Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864.

(2) The owner of a chemical plant or petroleum refinery shall comply with the requirements of subrule (1) of this rule or shall ensure the installation is installed as prescribed by the ASME code for chemical plants and petroleum refineries, B31.3, 1998 edition.

(3) A licensee under this rule is not required to possess an ASME code symbol stamp, but shall hold a valid installer's license.

(4) The owner shall ensure that the installation of all of the following piping is in accordance with the requirements of subrule (1) of this rule:

- (a) Blowdown piping beyond the second valve out to the safe point of discharge.
- (b) Steam piping out to the load.
- (c) Feed-water piping from the pump.
- (d) Condensate piping.

History: 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4033 Permits; Documentation for installation, reinstallation, and repair of boilers and boiler-related piping.

Rule 33. (1) All of the following provisions apply to permits:

- (a) A person shall not install, reinstall, alter, or repair a boiler without holding a proper license and first securing a permit from the boiler division, department of consumer and industry services.
- (b) A person shall not install, repair, or replace welded pipe without holding a proper license and first securing a permit from the boiler division, department of consumer and industry services.
- (c) A person shall not install, repair, or replace nonwelded pipe without holding a proper license. A permit is not required.

(2) All of the following provisions apply to repair reports:

- (a) A licensee who makes welded repairs shall furnish the boiler division, department of consumer and industry services, with an original and 2 copies of a completed form prescribed by the boiler division.
- (b) A licensee who makes nonwelded repairs to boilers shall furnish the boiler division, department of consumer and industry services, with an original and 2 copies of a completed form prescribed by the boiler

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division.

(c) A public utility or industrial plant that has been exempted under section 23 of the act that makes a welded repair to a boiler or boiler external piping, as defined in section I of the ASME code, shall furnish the boiler division, department of consumer and industry services, with a completed repair report on forms prescribed by the boiler division.

(d) A public utility or industrial plant that has been exempted under section 23 of the act that makes a welded repair to non-boiler external piping shall maintain records of the repairs and make the records available for review as required by the board of boiler rules.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1979 ACS 8, Eff. Dec. 9, 1981; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4035

Source: 1995 AACS.

R 408.4038 Fees.

Rule 38. Fees for licenses, permits, certificates, and inspections are as follows:

Licenses	
Installer exam	\$75.00
Installer renewal	\$75.00
Repairer exam.	\$75.00
Repairer renewal	\$75.00
Inspector exam	\$75.00
Inspector renewal	\$25.00
Permits	
Nuclear installation permit	\$1,200.00
Nuclear repair permit	\$350.00
Installation permit	\$50.00
Repair permit	\$50.00
Certificates	
Certificates	\$20.00
Inspections	
Power boilers-150 square feet or less	\$35.00
Power boilers-more than 150 square feet to 4,000 square feet	\$100.00
Power boilers-more than 4,000 square feet to 10,000 square feet	\$115.00
Power boilers-more than 10,000 square feet	\$130.00
Low pressure heating boiler without manhole	\$35.00
Low pressure heating boiler with manhole	\$45.00
Low pressure hot water supply boiler	\$25.00
Low pressure process boiler without manhole	\$35.00
Low pressure process boiler with manhole	\$45.00

History: 1979 ACS 8, Eff. Dec. 9, 1981; 1991 MR 1, Eff. Jan. 28, 1991; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4039 Permits to alter boiler, piping, or vessel.

Rule 39. (1) The boiler division of the department of consumer and industry services may issue a permit

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to alter a boiler, piping, or vessel subject to these rules only to a Michigan-licensed boiler repairer who possesses a valid certificate of authorization from the national board of boiler and pressure vessel inspectors for alterations or the ASME boiler and pressure vessel committee to build the type of boiler, piping, or vessel being altered. Drawings and calculations covering all details of the proposed alteration shall accompany the application for a permit to alter.

(2) The licensed repairer shall ensure that alterations comply with the NBIC or section of the ASME code under which the original boiler, piping, or vessel was constructed, including any service restrictions, or later editions of the ASME code that are compatible with the nature of the alteration.

(3) An inspector who holds a valid national board commission and who is otherwise qualified as required by these rules shall make the required inspections. The inspector shall authorize the proposed alteration before it is undertaken.

(4) The licensed repairer who makes the alteration shall prepare a report on forms prescribed by the boiler division, department of consumer and industry services. The licensed repairer shall furnish an original and 2 copies of the report to the boiler division, department of consumer and industry services, and, upon request, 1 copy of the report to the boiler owner and user. The report shall clearly indicate what changes have been made to the original construction. The report shall show, in the spaces provided, the manufacturer's serial number of the boiler, the national board number, if assigned, and the Michigan serial number assigned.

(5) The licensed repairer who makes the alteration shall prepare and attach a nameplate that complies with the requirements of the NBIC. A licensed repairer is not required to apply the national board "R" symbol stamp to the alteration nameplate.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 73, Eff. Nov. 4, 1972; 1979 AC; 1979 ACS 8, Eff. Dec. 9, 1981; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4043

Source: 1997 AACS.

R 408.4047 Exempt boilers.

Rule 47. These rules do not apply to any of the following:

- (a) A boiler under federal control.
- (b) A swimming pool heater, open car wash heater, and similar types of equipment which do not have intervening valves on the return or discharge piping, which do not have a reduction in pipe size in the return or discharge piping, and which do not generate more than normal circulating pump pressure.
- (c) A miniature steam or marine engine used for a hobby.
- (d) A boiler used in the power plant of a self-propelled vehicle designed primarily for transportation of persons or property on a highway, except for a vehicle used exclusively on stationary rails or tracks.
- (e) A boiler used on a mint farm for mint processing purposes.
- (f) A nonvaporizing, organic fluid boiler if the boiler meets all of the following criteria:
 - (i) The system is vented and does not have valves or restrictions in the pipe between the boiler and the vent.
 - (ii) The vent pipe is sized so that the thermal expansion of the fluid will not result in an increase in pressure on the system, which is verifiable with engineering data.
 - (iii) The owner or user provides the boiler division, department of consumer and industry services, with calculations performed by an engineer which verify that pressure due to thermal expansion cannot exist in the boiler as installed.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 61, Eff. Feb. 16, 1970; 1954 ACS 68, Eff. June 3, 1971; 1954 ACS 86, Eff. Jan. 16, 1976; 1979 AC; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4049

Source: 1981 AACS.

R 408.4051

Source: 1981 AACS.

R 408.4052

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Source: 1995 AACS.

R 408.4053

Source: 1997 AACS.

R 408.4055 Right of access.

Rule 55. The director, chief inspector, or any deputy inspector shall have free access, during reasonable hours, to any premises in the state where a boiler is being constructed, installed, repaired, operated, or connected and ready for use for the purpose of ascertaining whether the boiler is in accordance with the act. History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4057 Boiler inspection.

Rule 57. (1) An inspector who is properly licensed to inspect boilers in this state shall thoroughly inspect a boiler that is used or proposed to be used in this state as to its construction, installation, and condition as follows:

(a) A power boiler, process boiler, or high-pressure, high-temperature water boiler shall receive a certificate inspection annually and shall also be externally inspected annually, while under pressure, within 6 months from the date of the internal inspection.

(b) A low-pressure steam or vapor heating boiler shall receive a certificate inspection biennially.

(c) Hot water heating and hot water supply boilers shall receive a certificate inspection biennially, with an internal inspection at the discretion of the inspector.

(d) A nonvaporizing, organic fluid boiler that is not exempt under these rules shall receive an external certificate inspection biennially.

(e) A grace period of 2 months beyond the periods specified in subdivisions (a) to (e) of this subrule may lapse between certificate inspections, and the board may permit longer periods between certificate inspections.

(2) The chief inspector, deputy inspector, or a special inspector provided for in the act shall make the inspections specified in this rule.

(3) If, at the discretion of the inspector, a hydrostatic test is necessary, the boiler owner or user shall ensure that the test is performed in the presence of the inspector.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 98, Eff. Jan. 24, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 9, 1981; 1985 MR 2, Eff. Mar. 7, 1985; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4061

Source: 1997 AACS.

R 408.4063

Source: 1997 AACS.

R 408.4071

Source: 1995 AACS.

R 408.4073

Source: 1981 AACS.

R 408.4075

Source: 1995 AACS.

R 408.4077

Source: 1981 AACS.

R 408.4079

Source: 1981 AACS.

R 408.4081

Source: 1995 AACS.

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R 408.4087

Source: 1995 AACS.

R 408.4091

Source: 1995 AACS.

R 408.4093

Source: 1995 AACS.

R 408.4095

Source: 1997 AACS.

R 408.4096 Filing of welding procedures.

Rule 96. (1) If welding is employed in the installation or reinstallation of a boiler or piping, then the licensed installer shall file welding procedure specifications and the procedure qualification reports qualified in accordance with the requirements of ASME code section IX, welding and brazing qualifications, with the boiler division, department of consumer and industry services, before conducting any installation requiring welding.

(2) A licensed installer who utilizes welding in the installation or reinstallation of boilers or piping shall have available, for the inspector's review, welding procedure specifications and welder performance qualification records to be used or that were used in the installation or reinstallation.

History: 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4099

Source: 1995 AACS.

R 408.4103

Source: 1995 AACS.

R 408.4105

Source: 1981 AACS.

R 408.4107

Source: 1995 AACS.

R 408.4109 Classes of boiler installer's licenses.

Rule 109. (1) A class 1B installer's license qualifies a person to install a low-pressure boiler that does not exceed a firing rate of 1,000,000 Btu per hour as certified by the boiler manufacturer. For a class 1B license, the sum of all modules in a modular boiler shall not exceed a firing rate of 1,000,000 Btu per hour as certified by the boiler manufacturer.

(2) A class 2B installer's license qualifies a person to install a low-pressure boiler of any capacity or firing rate.

(3) A class 3B installer's license qualifies a person to install a power boiler that has a capacity of not more than 5,000 pounds of steam per hour.

(4) A class 4B installer's license qualifies a person to install a boiler that has a capacity of not more than 300,000 pounds of steam per hour.

(5) A class 5B installer's license qualifies a person to install a boiler of any capacity or firing rate, except for a nuclear heat source boiler.

(6) A class 6B installer's license qualifies a person to install a boiler that utilizes a nuclear heat source or its parts, appurtenances, or system components. Before a license is issued, an applicant for a class 6B license shall give evidence of familiarity with and knowledge of all federal rules and regulations regarding the installation of a boiler that has a nuclear heat source and shall be in the employ of a company in possession of a valid ASME nuclear code symbol applicable to the portions of any nuclear boiler system that the company proposes to install.

(7) A class P license qualifies a person to install non-boiler external piping or repair non-boiler external

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piping as defined by ASME code B31.1 and R 408.4032.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 68, Eff. June 3, 1971; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4110

Source: 1997 AACS.

R 408.4113

Source: 1997 AACS.

R 408.4114 Inspection of components and systems in a nuclear power plant.

Rule 114. (1) Preservice (baseline) inspection, in-service inspection, repair, replacement, modification, alteration, examination, testing, records, and reports of individual nuclear components, parts, appurtenances, piping, supports, nuclear systems, applicable associated auxiliary systems, and complete nuclear power plants that are in compliance with all of the requirements of the construction code, at the point in time the requirements have been completed, irrespective of the physical location, shall be as prescribed in section XI, rules for in-service inspection of nuclear power plant components, of the ASME boiler and pressure vessel code. The specific edition and addenda of ASME code section XI which shall be followed is that required by 10 C.F.R. Part 50. A copy of the current edition of section XI may be inspected at the Okemos office of the department of consumer and industry services, bureau of construction codes, boiler division. Section XI may be purchased at a cost as of the time of adoption of these rules of \$370.00 from the ASME International, 22 Law Drive, Fairfield, New Jersey 07007, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864.

(2) The owner of a nuclear power plant shall file inspection plans and schedules, pump and valve testing programs, and requests for relief from section XI of the ASME code requirements with the boiler division, department of consumer and industry services.

History: 1954 ACS 68, Eff. June 3, 1971; 1954 ACS 86, Eff. Jan. 16, 1976; 1954 ACS 98, Eff. Jan. 24, 1979; 1979 AC; 1985 MR 2, Eff. Mar. 7, 1985; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4116

Source: 1981 AACS.

R 408.4119

Source: 1995 AACS.

R 408.4120

Source: 1997 AACS.

R 408.4121

Source: 1995 AACS.

R 408.4123

Source: 1981 AACS.

R 408.4125

Source: 1995 AACS.

R 408.4127 Boiler repairers; classes of licenses.

Rule 127. (1) A class I license allows a licensee to repair a boiler by means other than welding, riveting, or other fabrication process.

(2) A class II license allows a licensee to repair a low-pressure boiler, a hot water supply boiler, and a fire tube boiler of any pressure and to perform work covered by a class I license.

(3) A class III license allows a licensee to repair a water tube boiler designed for a maximum allowable working pressure of not more than 700 psi and a boiler covered by a class II license.

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(4) A class IV license allows a licensee to repair or field-erect a boiler of any pressure, except for a boiler that has a nuclear heat source. A licensee who field-erects boilers shall be in the employ of a company in possession of the appropriate ASME code symbol stamps for the type of boiler being erected.

(5) A class V license allows a licensee to erect and repair a boiler that has a nuclear heat source or its parts, appurtenances, or system components. Before a license is issued, an applicant for a class V license shall give evidence of familiarity with and knowledge of all federal rules and regulations regarding the construction of a boiler that has a nuclear heat source and shall be employed by a company in possession of a valid ASME N-type symbol stamp applicable to the portions of any nuclear boiler system he or she proposes to repair.

(6) A class P license qualifies a person to install or repair non-boiler external piping as defined by ASME code B31.1.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 61, Eff. Feb. 16, 1970; 1954 ACS 73, Eff. Nov. 4, 1972; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4129

Source: 1995 AACS.

R 408.4139

Source: 1995 AACS.

R 408.4143

Source: 1981 AACS.

R 408.4149

Source: 1995 AACS.

R 408.4159

Source: 1997 AACS.

R 408.4163

Source: 1995 AACS.

R 408.4169

Source: 1995 AACS.

R 408.4172

Source: 1995 AACS.

R 408.4173

Source: 1995 AACS.

R 408.4174

Source: 1997 AACS.

R 408.4177

Source: 1981 AACS.

R 408.4179

Source: 1995 AACS.

R 408.4181

Source: 1997 AACS.

R 408.4182

Source: 1995 AACS.

R 408.4183

Source: 1997 AACS.

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R 408.4184
Source: 1997 AACS.

R 408.4185
Source: 1995 AACS.

R 408.4186
Source: 1995 AACS.

R 408.4187
Source: 1995 AACS.

R 408.4189 Air for combustion.

Rule 189. (1) The boiler owner shall ensure that a boiler has adequate outside combustion air as specified in the state mechanical code.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4191
Source: 1997 AACS.

R 408.4193
Source: 1995 AACS.

R 408.4195 Exits from boiler rooms.

Rule 195. (1) The owner shall ensure that a boiler room has not less than 2 egress doorways where the area of the room is more than 500 square feet and the Btu/hour input capacity of the boiler or boilers is more than 400,000 Btu/hour.

(2) The owner shall ensure that doorways are separated by a horizontal distance equal to not less than ½ of the diagonal dimension of the room. If 2 doorways are required by this rule, then a fixed ladder access out of the room is permitted in place of 1 doorway.

(3) An inspector shall notify the chief inspector of an owner or user who is required to comply with subrule (1) of this rule. The chief inspector shall give written notice to the owner or user that the necessary work must be completed within 1 year from the date of notification.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

PART 2. EXISTING INSTALLATIONS
STEAM BOILERS

R 408.4214
Source: 1995 AACS.

R 408.4270
Source: 1985 AACS.

R 408.4275
Source: 1997 AACS.

PART 3. INSPECTION AND TESTING FOR NEW CONSTRUCTION;
INSTALLATION AND ALTERATION OF BOILERS AND PIPING

R 408.4301
Source: 1995 AACS.

R 408.4302
Source: 1995 AACS.

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R 408.4303
Source: 1995 AACs.

R 408.4304
Source: 1995 AACs.

R 408.4306
Source: 1997 AACs.

R 408.4309
Source: 1997 AACs.

R 408.4312
Source: 1997 AACs.

R 408.4315
Source: 1997 AACs.

R 408.4318
Source: 1997 AACs.

R 408.4321
Source: 1997 AACs.

R 408.4324
Source: 1997 AACs.

R 408.4327
Source: 1997 AACs.

R 408.4330
Source: 1997 AACs.

R 408.4333
Source: 1997 AACs.

R 408.4336
Source: 1997 AACs.

R 408.4339
Source: 1997 AACs.

R 408.4342
Source: 1997 AACs.

R 408.4345
Source: 1997 AACs.

R 408.4348
Source: 1997 AACs.

R 408.4351
Source: 1997 AACs.

R 408.4354
Source: 1997 AACs.

R 408.4357

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Source: 1997 AACS.

R 408.4360

Source: 1997 AACS.

R 408.4363

Source: 1997 AACS.

R 408.4366

Source: 1997 AACS.

R 408.4369

Source: 1997 AACS.

R 408.4372

Source: 1997 AACS.

R 408.4375

Source: 1997 AACS.

R 408.4378

Source: 1997 AACS.

R 408.4381

Source: 1997 AACS.

R 408.4384

Source: 1997 AACS.

R 408.4387

Source: 1997 AACS.

R 408.4390

Source: 1997 AACS.

R 408.4393

Source: 1997 AACS.

R 408.4396

Source: 1997 AACS.

PART 4. INSPECTION OF FUSION WELDING

R 408.4401

Source: 1997 AACS.

R 408.4402

Source: 1997 AACS.

R 408.4405

Source: 1997 AACS.

R 408.4407

Source: 1997 AACS.

R 408.4409

Source: 1997 AACS.

R 408.4410

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Source: 1997 AACS.

R 408.4412

Source: 1997 AACS.

R 408.4414

Source: 1997 AACS.

R 408.4416

Source: 1997 AACS.

R 408.4418

Source: 1997 AACS.

R 408.4420

Source: 1997 AACS.

R 408.4422

Source: 1997 AACS.

R 408.4424

Source: 1997 AACS.

R 408.4426

Source: 1997 AACS.

R 408.4428

Source: 1997 AACS.

R 408.4430

Source: 1997 AACS.

R 408.4432

Source: 1997 AACS.

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R 408.4434

Source: 1997 AACS.

R 408.4436

Source: 1997 AACS.

R 408.4438

Source: 1997 AACS.

R 408.4440

Source: 1997 AACS.

R 408.4442

Source: 1997 AACS.

R 408.4444

Source: 1997 AACS.

R 408.4446

Source: 1997 AACS.

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R 408.4448
Source: 1997 AACS.

R 408.4450
Source: 1997 AACS.

R 408.4452
Source: 1997 AACS.

R 408.4454
Source: 1997 AACS.

R 408.4456
Source: 1997 AACS.

R 408.4458
Source: 1997 AACS.

R 408.4460
Source: 1997 AACS.

R 408.4462
Source: 1997 AACS.

R 408.4466
Source: 1997 AACS.

R 408.4468
Source: 1997 AACS.

R 408.4470
Source: 1997 AACS.

R 408.4472
Source: 1997 AACS.

R 408.4474
Source: 1997 AACS.

R 408.4476
Source: 1997 AACS.

R 408.4478
Source: 1997 AACS.

R 408.4480
Source: 1997 AACS.

R 408.4482
Source: 1997 AACS.

R 408.4484
Source: 1997 AACS.

R 408.4486
Source: 1997 AACS.

R 408.4488

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Source: 1997 AACS.

R 408.4489

Source: 1997 AACS.

R 408.4490

Source: 1997 AACS.

R 408.4491

Source: 1997 AACS.

R 408.4492

Source: 1997 AACS.

R 408.4493

Source: 1997 AACS.

R 408.4494

Source: 1997 AACS.

R 408.4495

Source: 1997 AACS.

R 408.4496

Source: 1997 AACS.

R 408.4497

Source: 1997 AACS.

R 408.4498

Source: 1997 AACS.

R 408.4499

Source: 1997 AACS.

PART 5. INSERVICE INSPECTION OF BOILERS

R 408.4501

Source: 1995 AACS.

R 408.4502 Rescinded.

History: 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4503

Source: 1995 AACS.

R 408.4505 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4507 Special hydrostatic test.

Rule 507. (1) At the interval specified by this rule, the owner shall ensure that a special hydrostatic test is performed. The owner shall ensure that the test pressure is not less than 80% of the maximum allowable working pressure and is not more than 1½ times the maximum allowable working pressure. The test

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pressure shall be acceptable to the inspector. The owner shall ensure that the water temperature used to apply the hydrostatic test is not less than 70 degrees Fahrenheit and that the maximum metal temperature is not more than 120 degrees Fahrenheit. Hold time for the examination by the inspector shall be the time necessary for the inspector to conduct the examination, but not less than 10 minutes. At the discretion of the inspector, the owner shall expose all longitudinal seams, girth seams, boiler supports, and attachments for inspection.

- (a) The owner shall ensure that a test of a riveted boiler is performed at 30 years and every 4 years thereafter. An inspector shall decide whether it is necessary to remove rivets to ascertain their condition .
- (b) The owner shall ensure that a test of a lap seam boiler which is less than 36 inches in diameter and which operates at 100 PSIG or less is performed at 20 years and every 4 years thereafter. A lap seam boiler which is more than 36 inches in diameter or which operates at more than 100 PSIG is not permitted to operate in this state.
- (c) The owner shall ensure that a test is performed on a welded boiler at 30 years and every 8 years thereafter.
- (d) The owner shall ensure that a test is performed on a cast iron boiler at 30 years and every 4 years thereafter. The hydrostatic pressure shall not exceed the safety/safety relief valve setting. Internal inspection is at the discretion of the inspector.
- (2) At the discretion of the inspector, a nondestructive examination may be utilized for seams or weldments that are inaccessible.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1954 ACS 81, Eff. Nov. 7, 1974; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4511 Nonvaporizing organic fluid boilers.

Rule 511. (1) A nonvaporizing organic fluid boiler is a boiler designed to heat, but not vaporize, a fluid in a closed system.

- (2) The owner shall ensure that a nonvaporizing organic fluid boiler is constructed in accordance with the ASME boiler and pressure vessel code.
- (3) The owner shall ensure that stop valves are located at an accessible point in the supply and return pipe connections as near the boiler as is practicable.
- (4) The owner shall ensure that a nonvaporizing organic fluid boiler has the following minimum equipment:
 - (a) One operating temperature control and 1 high limit temperature control.
 - (b) A relief valve of sufficient capacity to relieve the excess thermal fluid as a result of thermal expansion verified by engineering calculations provided by the owner or user.
 - (c) A thermometer calibrated to not less than 133% of the expected operating temperature.
 - (d) A pressure gauge calibrated to not less than 150% of the expected operating pressure.
 - (e) A low level or flow sensing device suitable for operating conditions.
- (5) The owner shall ensure that a fuel train meets the requirements of ASME code CSD-1.

History: 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4512 Miniature hobby locomotive boilers.

Rule 512. (1) A miniature hobby locomotive boiler is designed to be operated on a narrow gauge track of less than 24 inches.

- (2) At the initial inspection of a miniature hobby locomotive boiler the owner shall provide the chief boiler inspector with design specifications and calculations for review and acceptance. If a boiler is approved for use, then the boiler division of the department of consumer and industry services shall issue an identifying state number and a deputy boiler inspector shall attach it to the boiler.
- (3) The owner shall ensure that a miniature hobby locomotive boiler has the following minimum equipment:
 - (a) A pressure gauge calibrated to approximately 1½ times the operating pressure, but not more than 4 times the operating pressure.
 - (b) A means to extinguish the fire in the firebox in the event of a low water condition.
 - (c) Two means of feeding water to the boiler, 1 of which shall be operable while the locomotive is stationary.
 - (d) A water level gauge glass located so that the top of the bottom nut of the gauge glass will be approximately 10% of the distance between the crown sheet and the shell, but not less than ½ inch above

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the crown sheet.

(e) Two safety valves set at not more than 10% above the operating pressure for boilers fabricated after the effective date of the rules. The capacity of the safety valves shall be equal to or greater than the calculated steam generating capacity of the boiler.

(4) The owner shall determine the maximum allowable working pressure of a miniature hobby locomotive boiler by calculation. In place of acceptable calculations, the owner shall subject the boiler to a hydrostatic pressure test of 1½ times the owner specified operating pressure.

(5) Triennially, during the certificate inspection, the owner shall hydrostatically test the boiler to not more than 1½ times the operating pressure.

(6) The boiler division shall develop procedures, policies and check lists necessary to accomplish the inspections and tests required by these rules.

(7) Repairs to miniature hobby locomotive boilers are exempt from the licensing and permitting requirements of the act. Repair welding shall be made in accordance with the requirements of ASME code section IX. Welding procedures and performance qualification shall be filed with the boiler division for review.

History: 1999 MR 12, Eff. Jan. 27, 2000.

R 408.4513 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4515 Plant personnel to conduct test of boiler attachments or apparatus in presence of inspector.

Rule 515. If boiler attachments or apparatus require testing, then plant personnel shall perform the test in the presence of the inspector, unless otherwise ordered.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4517 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4518 Inspection of low water cutoffs.

Rule 518. The owner shall ensure that an inspection of the low water cutoff is performed at least once during the certificate period, preferably at the time of the certificate inspection.

(a) The owner shall ensure that the low water fuel cutoffs (float models) are disassembled and cleaned to allow an inspection of the float and float chamber.

(b) The owner shall ensure the removal of the low water fuel cutoff (probe and flow switch models) from the boiler or its associated piping for inspection. An acceptable alternative allows the owner to ensure a test performed for operability by lowering the water level or stopping flow to actuate the low water cutoff and secure the boiler.

History: 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4522

Source: 1995 AACS.

R 408.4524 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4526 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12,

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Eff. Jan. 4, 2000.

R 408.4529 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4531 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4534 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4536 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4538 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4540

Source: 1997 AACS.

R 408.4542

Source: 1997 AACS.

R 408.4545 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4547 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4550 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4552

Source: 1997 AACS.

R 408.4554 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4556

Source: 1997 AACS.

R 408.4559 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4561 Rescinded.

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History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4566 Inspection and testing of safety valves and safety relief valves.

Rule 566. (1) Safety valves and safety relief valves are the most important attachments on a boiler.
(2) The inspector shall ensure that there is no accumulation of rust, scale, or other foreign substance in the valve body that will interfere with the free operation of the valve. If tested under operating conditions, the boiler pressure shall be allowed to raise slowly to the popping pressure and subsequently fall to check the popping pressure and blowdown. If this is not practical, the owner shall ensure that a test of the valve for free operation is performed using the lifting lever if the boiler pressure is 75% or more of the set pressure. Following resetting, the owner shall ensure that the valve is resealed and shall ensure that the identifying mark of the organization responsible for resetting the valve is included. The inspector shall check the nameplate of the safety valve or safety relief valve to verify that the set pressure is correct and the capacity is adequate. The inspector shall check that the set pressure and blowdown adjustments are properly sealed. Where there is a discharge pipe, the inspector shall check the discharge pipe supports for adequacy and determine, at the time the valve is operated, whether the drain opening in the discharge pipe is free.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4569 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4570

Source: 1995 AACS.

R 408.4572 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4578 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4580 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4583 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4586 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4590 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

PART 6. REPAIR OF BOILERS
SCOPE OF RULES FOR REPAIR BY RIVETING

R 408.4601

Source: 1995 AACS.

R 408.4602

Source: 1995 AACS.

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R 408.4603

Source: 1995 AACS.

R 408.4604

Source: 1995 AACS.

R 408.4605

Source: 1995 AACS.

R 408.4606

Source: 1995 AACS.

R 408.4607

Source: 1995 AACS.

R 408.4608

Source: 1995 AACS.

R 408.4609

Source: 1995 AACS.

R 408.4610

Source: 1995 AACS.

R 408.4611

Source: 1995 AACS.

R 408.4612

Source: 1995 AACS.

R 408.4613

Source: 1995 AACS.

R 408.4614

Source: 1995 AACS.

R 408.4615

Source: 1995 AACS.

R 408.4616

Source: 1995 AACS.

R 408.4617

Source: 1995 AACS.

R 408.4618

Source: 1995 AACS.

R 408.4619

Source: 1995 AACS.

R 408.4620

Source: 1995 AACS.

R 408.4621 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 3, 2000.

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R 408.4622

Source: 1995 AACS.

R 408.4623

Source: 1995 AACS.

R 408.4624

Source: 1995 AACS.

R 408.4625

Source: 1995 AACS.

SCOPE OF RULES FOR REPAIR BY WELDING

R 408.4626 Applicability of rules to repairs by welding.

Rule 626. (1) These rules apply when repairs are to be made to boilers by welding. If a repair outside the scope of these rules is deemed feasible by the inspector, then the repair may be undertaken only with prior approval from the boiler division, department of consumer and industry services. The repairer shall ensure that the repairs make a boiler as safe as the original construction.

History: 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan 4, 2000.

R 408.4627 Routine repairs.

Rule 627. (1) A repair of a routine nature is a repair that restores the original design configuration and materials of a boiler or its pressure parts. It may involve weld buildup of eroded or corroded pressure boundary surfaces or like-for-like replacement of tubes or pipes. A licensed repairer, including an organization that has been granted an exemption under section 23 of the act, shall make a routine repair.

(2) With the approval of the inspector, the licensed boiler repairer may be given prior authorization to perform welded repairs of a routine nature. The following are examples of routine repairs:

(a) Weld repair, seal welding, or the replacement of pipes, tubes and attachments. The replacement of tubes shall not exceed 10% of the total tubes in the boiler.

(b) The addition of nonpressure attachments to pressure parts where post-weld heat treatment is not required.

(c) The restoration of a pressure boundary by welding where post-weld heat treatment is not required.

(d) The welding of gauge holes where reinforcement is not a consideration.

(e) A change in the arrangement of tubes in furnace walls, economizers, or superheater sections.

(f) The addition or replacement of handholes or nozzles where reinforcement is not a consideration.

(g) The removal and reinstallation of welded handholes on boiler headers or pressure parts.

(3) A routine repair may be completed on a boiler without subsequently conducting a hydrostatic test if prior approval is obtained from the inspector.

(4) The inspector may require any additional examination or test necessary to satisfy himself or herself that the repair is safe.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4628

Source: 1995 AACS.

R 408.4631 Welding procedures.

Rule 631. (1) A boiler repairer shall file welding procedure specifications and the procedure qualifications reports qualified in accordance with the requirements of ASME code section IX, welding and brazing qualifications, with the boiler division, department of consumer and industry services, before conducting any repairs requiring welding.

(2) A boiler repairer who makes welded repairs shall have available, for the inspector's review, welding procedure specifications and welder performance qualifications records to be used or that were used in the

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conduct of the repair.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4633 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4635

Source: 1997 AACS.

R 408.4637

Source: 1995 AACS.

R 408.4639

Source: 1997 AACS.

R 408.4641

Source: 1997 AACS.

R 408.4643 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4645

Source: 1997 AACS.

R 408.4647 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4649 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4650 Rescinded.

History: 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4651 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4653

Source: 1997 AACS.

R 408.4655

Source: 1997 AACS.

R 408.4657

Source: 1997 AACS.

R 408.4659 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4660

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Source: 1995 AACS.

R 408.4661 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4662

Source: 1997 AACS.

R 408.4664

Source: 1997 AACS.

R 408.4666

Source: 1997 AACS.

R 408.4667

Source: 1995 AACS.

R 408.4668 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4670 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 61, Eff. Feb. 16, 1970; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4671 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4672 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4674

Source: 1997 AACS.

R 408.4675 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4676 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4677

Source: 1997 AACS.

R 408.4678

Source: 1997 AACS.

R 408.4679

Source: 1997 AACS.

R 408.4680 Rescinded.

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History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4682 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4683 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4684 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4686 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4687 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4688 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4689

Source: 1995 AACS.

R 408.4690 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4691 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4692

Source: 1997 AACS.

R 408.4693 Rescinded

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4694 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4695 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4696

Source: 1997 AACS.

R 408.4697 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

PART 7. BOILER BLOWOFF SYSTEMS

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R 408.4701 Design and construction of blowoff tanks, separators, and flash tanks; reports.

Rule 701. (1) The owner shall ensure that blowoff tanks, separators, and flash tanks for use in the state of Michigan are designed and constructed as prescribed by these rules and the ASME boiler and pressure vessel code, section VIII, division 1, entitled "Unfired Pressure Vessels," 1998 edition, and its addenda. Section VIII and addenda are adopted by reference in these rules and may be reviewed at the Okemos office of the department of consumer and industry services. A copy of Section VIII of the ASME code and addenda may be purchased at a cost as of the time of adoption of these rules of \$385.00 from the ASME International, 22 Law Drive, Fairfield, New Jersey 07007, or from the Michigan Department of Consumer and Industry Services, 2501 Woodlake Circle, Okemos, Michigan 48864. The owner shall ensure that a blowoff tank has a maximum allowable working pressure of 50 psig minimum, with both heads preferably concave to pressure, and is constructed in accordance with the design illustrated in figure 23 and all of the following requirements:

(a) The blowoff tank, its fittings, and connections shall be sized in accordance with the provisions of table 5 in R 408.4750. Blowoff separators shall be sized by selecting a separator that has a blowoff inlet connection equal to or greater than the size of the largest blowoff connection on any 1 boiler.

(b) The blowoff tank, separator, or flash tank shall be provided with adequate openings to facilitate internal cleaning and inspection.

(c) The blowoff tank and separator shall be provided with all of the following fittings and connection openings:

(i) A blowoff inlet connection.

(ii) A water outlet connection.

(iii) A vent connection.

(iv) A drain connection. A drain connection is not required on a separator.

(v) A cold water supply line.

(vi) A thermometer connection.

(vii) A pressure gauge connection.

(d) The blowoff tank, separator, or flash tank shall be installed in a location that prevents it and its connected piping from freezing and shall be installed in a manner that permits both internal and external inspection.

(2) A manufacturer shall provide the boiler division, department of consumer and industry services, with the manufacturer's data reports. A data report that is signed by an authorized inspector, together with the ASME code symbol stamp on the vessel, is the record denoting that the blowoff tank, separator, or flash tank has been constructed in accordance with the ASME code.

(3) The manufacturer shall stamp all blowoff tanks, separators, and flash tanks for use in the state of Michigan with the words "National Board" and with the national board of boiler and pressure vessel inspector's serial number for the vessel. Stamping with the words "National Board" signifies inspection by an authorized inspector.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1954 ACS 56, Eff. Nov. 14, 1968; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4704

Source: 1995 AACS.

R 408.4711

Source: 1995 AACS.

R 408.4715

Source: 1997 AACS.

R 408.4719

Source: 1997 AACS.

R 408.4723

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Source: 1997 AACS.

R 408.4727

Source: 1995 AACS.

R 408.4731

Source: 1995 AACS.

R 408.4739

Source: 1995 AACS.

R 408.4747

Source: 1995 AACS.

R 408.4750

Source: 1995 AACS.

R 408.4756

Source: 1997 AACS.

R 408.4762

Source: 1997 AACS.

R 408.4768

Source: 1997 AACS.

R 408.4774

Source: 1997 AACS.

R 408.4780

Source: 1997 AACS.

R 408.4786

Source: 1997 AACS.

R 408.4792

Source: 1997 AACS.

R 408.4798

Source: 1997 AACS.

PART 8. CONTROLS

R 408.4801

Source: 1995 AACS.

FUEL CUTOFFS AND FEEDWATER REGULATORS

R 408.4853

Source: 1995 AACS.

R 408.4857 Rescinded.

History: 1954 ACS 49, Eff. Feb. 14, 1967; 1979 AC; 1995 MR 4, Eff. Apr. 21, 1995; rescinded 1999 MR 12, Eff. Jan. 4, 2000.

R 408.4859

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Source: 1997 AACS.

R 408.4861

Source: 1997 AACS.

R 408.4863

Source: 1997 AACS.

R 408.4865

Source: 1997 AACS.

R 408.4869

Source: 1997 AACS.

R 408.4871

Source: 1997 AACS.

R 408.4873

Source: 1997 AACS.

R 408.4876

Source: 1997 AACS.

R 408.4879

Source: 1997 AACS.

R 408.4882

Source: 1997 AACS.

R 408.4885

Source: 1997 AACS.

R 408.4888

Source: 1997 AACS.

R 408.4890

Source: 1997 AACS.

PART 9. LOW-PRESSURE SIDE OF REDUCING VALVES

R 408.4901

Source: 1997 AACS.

R 408.4910

Source: 1997 AACS.

R 408.4920

Source: 1997 AACS.

R 408.4930

Source: 1997 AACS.

R 408.4940

Source: 1997 AACS.

R 408.4950

Source: 1997 AACS.

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R 408.4960

Source: 1997 AACS.

R 408.4970

Source: 1997 AACS.

R 408.4980

Source: 1997 AACS.

R 408.4990

Source: 1997 AACS.

PART 15. HEARINGS

R 408.5501

Source: 1995 AACS.

R 408.5502

Source: 1997 AACS.

R 408.5503

Source: 1997 AACS.

R 408.5504

Source: 1997 AACS.

R 408.5505

Source: 1997 AACS.

R 408.5506

Source: 1997 AACS.

R 408.5507

Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF SAFETY AND REGULATION

OCCUPATIONAL SAFETY STANDARDS COMMISSION

GENERAL RULES

R 408.6171 Rescinded.

History: 1954 ACS 56, Eff. Nov. 14, 1968; 1979 AC; rescinded 1999 MR 1, Eff. Feb. 8, 1999.

BUREAU OF EMPLOYMENT STANDARDS

YOUTH EMPLOYMENT STANDARDS

PART 1. GENERAL PROVISIONS

R 408.6199

Annual Administrative Code Supplement
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Source: 1988 AACS.

PART 2. HAZARDOUS OCCUPATIONS IN GENERAL EMPLOYMENT

R 408.6201

Source: 1988 AACS.

R 408.6202

Source: 1988 AACS.

R 408.6203

Source: 1988 AACS.

R 408.6204

Source: 1988 AACS.

R 408.6205

Source: 1988 AACS.

R 408.6206

Source: 1988 AACS.

R 408.6207

Source: 1988 AACS.

R 408.6208

Source: 1988 AACS.

R 408.6209

Source: 1988 AACS.

**PART 3. DEVIATIONS FROM ESTABLISHED STANDARDS OR FROM
LEGAL HOURS OF EMPLOYMENT FOR 16- AND 17-YEAR-OLD MINORS**

R 408.6301

Source: 1988 AACS.

R 408.6302

Source: 1988 AACS.

R 408.6303

Source: 1988 AACS.

R 408.6304

Source: 1988 AACS.

R 408.6305

Source: 1988 AACS.

R 408.6306

Source: 1988 AACS.

R 408.6307

Source: 1988 AACS.

R 408.6308

Source: 1988 AACS.

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DIRECTOR'S OFFICE

ELEVATORS

PART 1. GENERAL PROVISIONS

R 408.8103

Source: 1996 AACS.

R 408.8108

Source: 1996 AACS.

R 408.8134

Source: 1996 AACS.

R 408.8138

Source: 1981 AACS.

R 408.8139

Source: 1996 AACS.

R 408.8141

Source: 1996 AACS.

R 408.8145

Source: 1981 AACS.

R 408.8150

Source: 1985 AACS.

R 408.8151

Source: 1992 AACS.

PART 2. EXISTING INSTALLATIONS

R 408.8201

Source: 1996 AACS.

R 408.8202

Source: 1996 AACS.

R 408.8203

Source: 1981 AACS.

R 408.8205

Source: 1996 AACS.

R 408.8215

Source: 1996 AACS.

R 408.8226

Source: 1996 AACS.

R 408.8229

Source: 1996 AACS.

R 408.8231

Source: 1996 AACS.

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R 408.8245
Source: 1996 AACS.

R 408.8257
Source: 1996 AACS.

R 408.8262
Source: 1996 AACS.

R 408.8270
Source: 1996 AACS.

R 408.8288
Source: 1996 AACS.

FREIGHT ELEVATORS—CLASS III

R 408.8364
Source: 1996 AACS.

R 408.8401
Source: 1996 AACS.

R 408.8403
Source: 1996 AACS.

R 408.8411
Source: 1996 AACS.

R 408.8415
Source: 1996 AACS.

ONE-MAN ELEVATORS—HAND POWERED

R 408.8440
Source: 1996 AACS.

ONE-MAN ELEVATORS—ELECTRIC POWERED

R 408.8476
Source: 1996 AACS.

R 408.8477
Source: 1996 AACS.

BELT MANLIFTS

R 408.8481
Source: 1992 AACS.

R 408.8485
Source: 1997 AACS.

R 408.8486
Source: 1997 AACS.

R 408.8492
Source: 1997 AACS.

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R 408.8493
Source: 1997 AACS.

PART 3. NEW CONSTRUCTION

R 408.8511
Source: 1985 AACS.

R 408.8519a
Source: 1985 AACS.

R 408.8523a
Source: 1997 AACS.

**INCLINED STAIRWAY CHAIRLIFTS AND INCLINED AND VERTICAL WHEELCHAIR LIFTS IN
BUILDINGS OTHER THAN PRIVATE RESIDENCES**

VERTICAL WHEELCHAIR LIFTS

R 408.8531
Source: 1996 AACS.

R 408.8532
Source: 1996 AACS.

R 408.8533
Source: 1996 AACS.

INCLINED WHEELCHAIR LIFTS

R 408.8534
Source: 1996 AACS.

R 408.8535
Source: 1996 AACS.

R 408.8536
Source: 1996 AACS.

R 408.8536a
Source: 1996 AACS.

R 408.8537
Source: 1997 AACS.

INCLINED STAIRWAY CHAIRLIFTS

R 408.8537a
Source: 1996 AACS.

PRIVATE RESIDENCE

INCLINED STAIRWAY CHAIRLIFTS AND INCLINED AND VERTICAL WHEELCHAIR LIFTS

PRIVATE RESIDENCE VERTICAL WHEELCHAIR LIFTS

R 408.8538
Source: 1996 AACS.

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R 408.8539
Source: 1996 AACS.

R 408.8540
Source: 1996 AACS.

PRIVATE RESIDENCE INCLINED WHEELCHAIR LIFTS

R 408.8540a
Source: 1996 AACS.

R 408.8540b
Source: 1996 AACS.

PRIVATE RESIDENCE INCLINED STAIRWAY CHAIRLIFTS

R 408.8540c
Source: 1996 AACS.

OUTDOOR INCLINE LIFTS

R 408.8541
Source: 1996 AACS.

R 408.8544
Source: 1996 AACS.

R 408.8561
Source: 1996 AACS.

R 408.8562
Source: 1996 AACS.

R 408.8563
Source: 1996 AACS.

R 408.8592
Source: 1996 AACS.

PART 4. MODIFICATION OF AMERICAN STANDARD SAFETY CODE

R 408.8601
Source: 1996 AACS.

R 408.8612
Source: 1997 AACS.

R 408.8613
Source: 1981 AACS.

R 408.8614
Source: 1981 AACS.

R 408.8615
Source: 1996 AACS.

R 408.8616
Source: 1997 AACS.

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R 408.8617
Source: 1981 AACS.

R 408.8618
Source: 1996 AACS.

R 408.8620
Source: 1981 AACS.

R 408.8621
Source: 1981 AACS.

R 408.8631
Source: 1981 AACS.

R 408.8632
Source: 1997 AACS.

R 408.8632a
Source: 1985 AACS.

R 408.8633
Source: 1997 AACS.

R 408.8634
Source: 1996 AACS.

R 408.8635
Source: 1997 AACS.

R 408.8635a
Source: 1997 AACS.

R 408.8636
Source: 1997 AACS.

HYDRAULIC ELEVATORS

R 408.8636a
Source: 1992 AACS.

R 408.8637
Source: 1997 AACS.

R 408.8638
Source: 1981 AACS.

R 408.8639
Source: 1996 AACS.

R 408.8639a
Source: 1997 AACS.

R 408.8639b
Source: 1996 AACS.

R 408.8641
Source: 1981 AACS.

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PRIVATE RESIDENCE ELEVATORS

R 408.8642
Source: 1996 AACS.

R 408.8643
Source: 1996 AACS.

R 408.8644
Source: 1996 AACS.

R 408.8645
Source: 1997 AACS.

R 408.8646
Source: 1997 AACS.

R 408.8647
Source: 1997 AACS.

R 408.8648
Source: 1996 AACS.

ESCALATORS

R 408.8661
Source: 1996 AACS.

R 408.8662
Source: 1996 AACS.

R 408.8663
Source: 1997 AACS.

INSPECTION AND TESTING OF ELEVATORS, DUMBWAITERS, AND ESCALATORS

R 408.8671
Source: 1992 AACS.

R 408.8672
Source: 1997 AACS.

R 408.8673
Source: 1997 AACS.

R 408.8674
Source: 1997 AACS.

FIRE FIGHTERS' SERVICE

R 408.8681
Source: 1996 AACS.

R 408.8682
Source: 1996 AACS.

R 408.8683
Source: 1996 AACS.

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R 408.8684

Source: 1997 AACS.

R 408.8685

Source: 1997 AACS.

R 408.8690

Source: 1981 AACS.

ALTERATIONS, REPAIRS, AND REPLACEMENTS

R 408.8691

Source: 1996 AACS.

R 408.8691a

Source: 1996 AACS.

R 408.8691b

Source: 1996 AACS.

R 408.8692

Source: 1981 AACS.

R 408.8693

Source: 1981 AACS.

R 408.8694

Source: 1981 AACS.

R 408.8695

Source: 1981 AACS.

PAYMENT OF WAGES AND FRINGE BENEFITS

R 408.9001 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; AACS 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9002 Definitions; A to D.

Rule 2. (1) As used in these rules:

(a) "Act" means Act No. 390 of the Public Acts of 1978, as amended, being S408.471 et seq. of the Michigan Compiled Laws, and known as the payment of wages and fringe benefits act.

(b) "Complainant" means any person who submits a signed complaint alleging a violation of the act and who provides the information required by the department.

(c) "Department" means the department of consumer and industry services.

(d) "Voluntary payment in full" means either of the following:

(i) Payment of wages and fringe benefits claimed before the issuance of a departmental determination.

(ii) Payment of the full amount of wages and fringe benefits due, plus the 10% per annum penalty and any exemplary damages assessed within 14 days of the date of the determination. If the last day of the 14-day period is a Saturday, Sunday, or a state holiday, then that day is excluded and the period extends until the end of the next day that is not a Saturday, Sunday, or state holiday.

(2) As used in the act:

(a) "An employee employed in a bona fide administrative capacity" means an employee who is compensated on a salary basis at not less than \$250.00 per week and whose primary duty is nonmanual work directly related to management policies of the general business operations or performing functions in the administration of an educational institution.

(b) "An employee employed in a bona fide executive capacity" means an employee to whom all of the

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following provisions apply:

- (i) Compensation is on a salary basis at not less than \$250.00 per week.
- (ii) The employee's primary duty is management.
- (iii) The employee supervises 2 or more employees.
- (c) "An employee employed in a bona fide professional capacity" means an employee who is compensated on a salary basis at not less than \$250.00 per week and whose primary duty is any of the following:
 - (i) Work in a field of science or learning that requires knowledge acquired by a prolonged course of specialized instruction.
 - (ii) Work in a recognized field of artistic endeavor that depends upon the talent of the employee.
 - (iii) Work in an educational institution as a teacher, tutor, instructor or lecturer.
- (d) "Bonus" means a premium or extra or irregular remuneration in addition to wages that is awarded to an employee under a written contract or written policy.
- (e) "Director" means the director of the department or his or her authorized representative.
- (f) "Informally resolve" means any of the following:
 - (i) Voluntary payment in full as defined in R 408.9002.
 - (ii) A settlement agreement as described in R 408.9026.
 - (iii) Withdrawal of the complaint as described in R 408.9027.

History: 1979 ACS 9, Eff. Jan. 21, 1982; AACS 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9003 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9004 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9005 Payment of fringe benefits on termination.

Rule 5. An employer shall pay fringe benefits due an employee at termination on the regularly scheduled payday for the period in which the termination occurs, unless otherwise specified in the terms of a written contract or written policy.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9006 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9007 Payment of wages on termination.

Rule 7. (1) An employer shall pay all wages due an employee who quits or is discharged, except for an employee who was engaged in the hand harvesting of crops, on the regularly scheduled payday for the period in which the termination occurs.

(2) An employer shall pay all wages due a discharged employee who was engaged in the hand harvesting or crops within 1 working day of the termination.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9008 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9009 Signed authorization; maintenance.

Rule 9. An employer shall maintain signed authorizations in the employment records.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9010 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9011 Rescinded.

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History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9012 Statement of hours worked and pay earned.

Rule 12. An employer shall furnish each employee with a written statement of the information required by section 9(2) of the act in a retainable form.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9013 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9014 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9015 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9016 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9017 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9018

Source: 1982 AACs.

R 408.9019 Acceptance of complaints by the department.

Rule 19. The department shall accept a complaint form or other written statement which is signed by the complainant and which provides all of the following information:

- (a) Name and address of complainant.
- (b) Name and address of employer who is alleged to have committed the violation.
- (c) The date or dates the violation is alleged to have occurred.
- (d) An estimate of the amount of wages or fringe benefits claimed.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9020 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9021 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9022 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9023 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9024 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9025 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9026 Settlement agreement.

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Rule 26. (1) A complaint may be informally resolved by a written settlement agreement that specifies all of the following:

- (a) The amount of payment agreed to.
 - (b) The terms of payment agreed to.
 - (c) The date payment is due.
 - (d) A waiver of all rights to contest the amount due.
- (2) The settlement agreement shall be signed by all of the following entities:
- (a) The complainant.
 - (b) The employer or the employer's representative.
 - (c) A representative of the department.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9027 Withdrawal of complaints; request to cease enforcement of order.

Rule 27. (1) A person who has filed a complaint with the department may withdraw the complaint at any time before issuance of a departmental determination.

(2) At any time after a departmental determination has been issued, a complainant may, in writing, request the department to cease enforcement of an order.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9028 Departmental determination.

Rule 28. (1) A departmental determination shall contain all of the following, if applicable:

- (a) The name of the complainant.
 - (b) The name of the employer.
 - (c) The findings of the department.
 - (d) A citation to the sections of the act violated, if any.
 - (e) An order for the payment of wages or fringe benefits due, if any, plus a 10% per annum penalty.
 - (f) An assessment of the civil penalties, if any, and the basis for the assessment.
 - (g) An assessment of exemplary damages, if any, and the basis for the assessment.
 - (h) Notice to the employer and employee of the right to request an appeal of the determination, including instructions on how to request an appeal, where to mail the request, and the date the appeal is due.
- (2) The department shall provide copies of the determination to the employer, the complainant, and designated legal representatives.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9029 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9030 Appeal of department determination.

Rule 30. (1) The 14-day period within which an appeal of a departmental determination may be filed excludes the date of the determination. The calendar day that the appeal is due is included. If the last day of the 14-day period is Saturday, Sunday, or a state holiday, then that day is excluded and the period extends until the end of the next day that is not a Saturday, Sunday, or state holiday.

(2) An appellant shall submit a written appeal which is signed by the appellant and which contains all of the following information:

- (a) The determination number.
 - (b) The name of the employer.
 - (c) The name of the employee.
- (3) An appellant shall submit an appeal to the department at the address specified on the determination.
- (4) The department shall transmit an appeal received more than 14 days after the notification of determination is issued to the hearings office of the department to determine if good cause exists for a late appeal.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

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R 408.9031 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9032 Rescinded.

History: 1979 ACS 9, Eff. Jan. 21, 1982; rescinded 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9033 Assessment of penalties; civil penalty.

Rule 33. (1) A civil penalty assessed under this rule shall not be more than \$1,000.00.

(2) An employer who violates section 2 to 8 or section 10 of the act shall be assessed a civil penalty of 50% of the amount of wages and fringe benefits due an employee.

(3) A civil penalty assessed under subrule (2) of this rule shall be collected only if the director is required to initiate civil action to enforce an order of the department that has become a final agency order.

(4) A civil penalty of \$1,000.00 shall be assessed for a violation of section 13 or section 13a of the act.

(5) A civil penalty of \$300.00 shall be assessed for a violation of section 9 of the act.

History: 1979 ACS 9, Eff. Jan. 21, 1982; 1998 MR 1, Eff. Feb. 12, 1998.

R 408.9034

Source: 1997 AACS.

GENERAL INDUSTRY SAFETY STANDARDS

PART 1. GENERAL PROVISIONS

R 408.10003

Source: 1993 AACS.

R 408.10015

Source: 1988 AACS.

R 408.10016

Source: 1983 AACS.

R 408.10018

Source: 1981 AACS.

R 408.10032

Source: 1997 AACS.

R 408.10033

Source: 1993 AACS.

R 408.10036

Source: 1983 AACS.

R 408.10037

Source: 1993 AACS.

R 408.10098

Source: 1993 AACS.

PART 1A. ABRASIVE WHEELS

R 408.10102

Source: 1990 AACS.

R 408.10103

Source: 1990 AACS.

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R 408.10105
Source: 1990 AACS.

R 408.10115
Source: 1990 AACS.

GUARDING PROVISIONS

R 408.10121
Source: 1990 AACS.

R 408.10124
Source: 1990 AACS.

SPEED PROVISIONS

R 408.10171
Source: 1997 AACS.

R 408.10172
Source: 1997 AACS.

R 408.10173
Source: 1990 AACS.

R 408.10174
Source: 1990 AACS.

R 408.10175
Source: 1990 AACS.

SPECIAL SPEEDS

R 408.10177
Source: 1990 AACS.

OPERATING PROVISIONS

R 408.10181
Source: 1990 AACS.

R 408.10186
Source: 1990 AACS.

R 408.10187
Source: 1990 AACS.

R 408.10198
Source: 1990 AACS.

R 408.10199
Source: 1990 AACS.

PART 2. FLOOR AND WALL OPENINGS, STAIRWAYS, AND SKYLIGHTS

R 408.10201
Source: 1989 AACS.

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R 408.10206
Source: 1989 AACS.

R 408.10208
Source: 1989 AACS.

R 408.10217
Source: 1989 AACS.

R 408.10219
Source: 1989 AACS.

R 408.10223
Source: 1989 AACS.

R 408.10228
Source: 1989 AACS.

R 408.10230
Source: 1989 AACS.

R 408.10231
Source: 1989 AACS.

R 408.10233
Source: 1989 AACS.

R 408.10235
Source: 1989 AACS.

R 408.10236
Source: 1989 AACS.

R 408.10237
Source: 1989 AACS.

R 408.10240
Source: 1989 AACS.

PART 3. FIXED LADDERS

R 408.10305
Source: 1994 AACS.

R 408.10306
Source: 1994 AACS.

R 408.10307
Source: 1994 AACS.

R 408.10308
Source: 1994 AACS.

R 408.10310
Source: 1994 AACS.

R 408.10311
Source: 1994 AACS.

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R 408.10323

Source: 1994 AACS.

R 408.10324

Source: 1994 AACS.

R 408.10333

Source: 1994 AACS.

R 408.10342

Source: 1994 AACS.

R 408.10345

Source: 1994 AACS.

R 408.10351 Safety devices.

Rule 351. (1) A cage, well, or ladder safety device shall be provided on a ladder that is more than 20 feet (6.1m) long and that rises to an unbroken length of not more than 30 feet (9.1m).

(2) A ladder safety device may be used on towers, water tanks, and chimney ladders that are more than 20 feet in unbroken length. The ladder safety device takes the place of cage protection. A landing is not required on a tower, water tank, or chimney ladder if a ladder safety device is used.

(3) A ladder safety device, such as one that incorporates a left belt, friction brake, or sliding attachment, shall be in compliance with the design requirements of the ladder it serves.

(4) Cages and wells that are provided for fixed ladders shall be designed to permit easy access to or egress from the ladders that they enclose. The cages and wells shall be continuous throughout the length of the fixed ladders, except for access, egress, and other transfer points. Cages and wells shall be designed and constructed to contain employees in the event of a fall and to direct them to a lower landing.

(5) Ladder surfaces shall be free of puncture or laceration hazards.

History: 1954 ACS 69, Eff. Nov. 15, 1971; 1954 ACS 99, Eff. Apr. 18, 1979; 1979 AC; 1994 MR 6, Eff. June 17, 1994; 1998 MR 1, Eff. Feb. 7, 1998.

R 408.10354

Source: 1994 AACS.

R 408.10355

Source: 1994 AACS.

R 408.10365

Source: 1982 AACS.

R 408.10371

Source: 1994 AACS.

R 408.10372

Source: 1994 AACS.

PART 4. PORTABLE LADDERS

R 408.10403

Source: 1981 AACS.

R 408.10407

Source: 1982 AACS.

R 408.10426

Source: 1997 AACS.

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R 408.10427
Source: 1981 AACS.

R 408.10428
Source: 1981 AACS.

R 408.10431
Source: 1982 AACS.

R 408.10441
Source: 1981 AACS.

R 408.10446
Source: 1982 AACS.

R 408.10447
Source: 1981 AACS.

R 408.10451
Source: 1981 AACS.

PART 5. SCAFFOLDING

R 408.10502
Source: 1992 AACS.

R 408.10503
Source: 1992 AACS.

R 408.10506
Source: 1992 AACS.

R 408.10507
Source: 1992 AACS.

R 408.10508
Source: 1992 AACS.

R 408.10511
Source: 1983 AACS.

R 408.10512
Source: 1981 AACS.

R 408.10513
Source: 1983 AACS.

R 408.10521
Source: 1981 AACS.

R 408.10524
Source: 1981 AACS.

R 408.10525
Source: 1983 AACS.

R 408.10527
Source: 1981 AACS.

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R 408.10529
Source: 1983 AACS.

R 408.10532
Source: 1983 AACS.

R 408.10535
Source: 1983 AACS.

R 408.10542
Source: 1981 AACS.

POWERED PLATFORMS

R 408.10561
Source: 1992 AACS.

R 408.10562
Source: 1992 AACS.

R 408.10563
Source: 1992 AACS.

R 408.10564
Source: 1992 AACS.

R 408.10565
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R 408.10566
Source: 1992 AACS.

R 408.10567
Source: 1992 AACS.

R 408.10568
Source: 1992 AACS.

R 408.10569
Source: 1992 AACS.

R 408.10570
Source: 1992 AACS.

R 408.10571
Source: 1992 AACS.

R 408.10572
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R 408.10573
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R 408.10574
Source: 1992 AACS.

R 408.10575
Source: 1992 AACS.

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R 408.10576
Source: 1992 AACS.

R 408.10577
Source: 1992 AACS.

R 408.10578
Source: 1992 AACS.

R 408.10579
Source: 1992 AACS.

R 408.10580
Source: 1992 AACS.

R 408.10581
Source: 1992 AACS.

WIRE, FIBER, AND SYNTHETIC ROPE

R 408.10582
Source: 1992 AACS.

R 408.10583
Source: 1992 AACS.

R 408.10584
Source: 1992 AACS.

R 408.10585
Source: 1992 AACS.

R 408.10586
Source: 1992 AACS.

R 408.10587
Source: 1992 AACS.

R 408.10588
Source: 1992 AACS.

R 408.10589
Source: 1992 AACS.

R 408.10590
Source: 1992 AACS.

R 408.10591
Source: 1992 AACS.

R 408.10592
Source: 1992 AACS.

PART 6. FIRE EXITS

GENERAL PROVISIONS

R 408.10601

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Source: 1990 AACS.

R 408.10603

Source: 1990 AACS.

R 408.10604

Source: 1990 AACS.

R 408.10605

Source: 1990 AACS.

R 408.10608

Source: 1990 AACS.

R 408.10611

Source: 1990 AACS.

CLASSES OF OCCUPANCY AND HAZARD OF CONTENTS

R 408.10621

Source: 1990 AACS.

R 408.10623

Source: 1993 AACS.

R 408.10624

Source: 1993 AACS.

MEANS OF EGRESS

R 408.10634

Source: 1990 AACS.

R 408.10636

Source: 1990 AACS.

R 408.10639

Source: 1990 AACS.

R 408.10644

Source: 1990 AACS.

R 408.10645

Source: 1990 AACS.

R 408.10647

Source: 1990 AACS.

R 408.10664

Source: 1990 AACS.

R 408.10679 RESCINDED.

History: 1954 ACS 62, Eff. May 18, 1970; 1979 AC; rescinded 2000 MR 6, Eff. May 5, 2000

R 408.10695

Source: 1990 AACS.

PART 7. GUARDS FOR POWER TRANSMISSION

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R 408.10703
Source: 1982 AACS.

R 408.10711
Source: 1982 AACS.

R 408.10712
Source: 1982 AACS.

R 408.10713
Source: 1982 AACS.

R 408.10714
Source: 1997 AACS.

R 408.10715
Source: 1982 AACS.

R 408.10716
Source: 1982 AACS.

R 408.10721
Source: 1982 AACS.

R 408.10722
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R 408.10725
Source: 1982 AACS.

R 408.10726
Source: 1982 AACS.

R 408.10727
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R 408.10730
Source: 1982 AACS.

R 408.10731
Source: 1982 AACS.

R 408.10734
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R 408.10741
Source: 1982 AACS.

R 408.10744
Source: 1982 AACS.

R 408.10753
Source: 1982 AACS.

R 408.10754
Source: 1982 AACS.

R 408.10757
Source: 1997 AACS.

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R 408.10763
Source: 1982 AACS.

PART 8. PORTABLE FIRE EXTINGUISHERS

GENERAL PROVISIONS

R 408.10801
Source: 1984 AACS.

R 408.10813
Source: 1984 AACS.

R 408.10814
Source: 1980 AACS.

DISTRIBUTION

R 408.10822
Source: 1984 AACS.

R 408.10823
Source: 1980 AACS.

R 408.10833
Source: 1980 AACS.

INSTALLATION, INSPECTION, TESTING, AND MAINTENANCE

R 408.10835
Source: 1984 AACS.

R 408.10836
Source: 1984 AACS.

R 408.10839
Source: 1984 AACS.

PART 9. FIXED FIRE EQUIPMENT

GENERAL PROVISIONS

R 408.10901
Source: 1984 AACS.

R 408.10903
Source: 1984 AACS.

R 408.10913
Source: 1984 AACS.

R 408.10919
Source: 1984 AACS.

R 408.10920
Source: 1984 AACS.

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AUTOMATIC SPRINKLER SYSTEMS

R 408.10921
Source: 1984 AACS.

R 408.10925
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R 408.10926
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R 408.10928
Source: 1984 AACS.

STANDPIPE AND HOSE SYSTEMS

R 408.10931
Source: 1984 AACS.

R 408.10934
Source: 1984 AACS.

R 408.10936
Source: 1997 AACS.

R 408.10937
Source: 1984 AACS.

CARBON DIOXIDE SYSTEMS

R 408.10941
Source: 1984 AACS.

DRY CHEMICAL SYSTEMS

R 408.10951
Source: 1984 AACS.

R 408.10952
Source: 1984 AACS.

FOAM SYSTEMS

R 408.10961
Source: 1984 AACS.

R 408.10963
Source: 1984 AACS.

R 408.10964
Source: 1984 AACS.

R 408.10965
Source: 1984 AACS.

HALOGENATED EXTINGUISHING SYSTEMS

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R 408.10971
Source: 1984 AACS.

LOCAL FIRE ALARM SYSTEMS

R 408.10981
Source: 1984 AACS.

R 408.10983
Source: 1984 AACS.

FIRE DETECTION SYSTEMS

R 408.10991
Source: 1984 AACS.

R 408.10993
Source: 1984 AACS.

R 408.10995
Source: 1984 AACS.

R 408.10999
Source: 1984 AACS.

PART 11. POLISHING, BUFFING, AND ABRADING

R 408.11111
Source: 1983 AACS.

PART 12. WELDING AND CUTTING

R 408.11205
Source: 1988 AACS.

R 408.11211
Source: 1983 AACS.

R 408.11212
Source: 1988 AACS.

R 408.11213
Source: 1988 AACS.

R 408.11214
Source: 1997 AACS.

R 408.11222
Source: 1988 AACS.

R 408.11225
Source: 1988 AACS.

R 408.11232
Source: 1981 AACS.

R 408.11234
Source: 1981 AACS.

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R 408.11242
Source: 1981 AACS.

R 408.11281
Source: 1988 AACS.

R 408.11292
Source: 1981 AACS.

R 408.11294
Source: 1981 AACS.

R 408.11297
Source: 1997 AACS.

R 408.11298
Source: 1981 AACS.

R 408.11299
Source: 1981 AACS.

PART 13. DERRICKS

R 408.11301
Source: 1982 AACS.

PART 14. CONVEYORS

R 408.11436
Source: 1997 AACS.

PART 16. LABELING OF HAZARDOUS SUBSTANCES

R 408.11601—R 408.11613
Source: 1997 AACS.

PART 18. OVERHEAD AND GANTRY CRANES

OPERATORS AND OPERATIONS

R 408.11851
Source: 1988 AACS.

R 408.11853
Source: 1989 AACS.

R 408.11859
Source: 1983 AACS.

PART 19. CRAWLER, LOCOMOTIVE, AND TRUCK CRANES

R 408.11913
Source: 1991 AACS.

R 408.11916
Source: 1997 AACS.

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R 408.11937
Source: 1989 AACS.

R 408.11943
Source: 1989 AACS.

PART 20. UNDERHUNG CRANES AND MONORAIL SYSTEMS

R 408.12001
Source: 1990 AACS.

R 408.12003
Source: 1990 AACS.

R 408.12004
Source: 1990 AACS.

R 408.12005
Source: 1990 AACS.

CONSTRUCTION, INSTALLATION, AND TESTING

R 408.12011
Source: 1997 AACS.

R 408.12012
Source: 1990 AACS.

R 408.12013
Source: 1990 AACS.

R 408.12014
Source: 1990 AACS.

R 408.12015
Source: 1990 AACS.

R 408.12016
Source: 1990 AACS.

R 408.12017
Source: 1990 AACS.

R 408.12018
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R 408.12019
Source: 1990 AACS.

OPERATORS AND OPERATIONS

R 408.12021
Source: 1990 AACS.

R 408.12022
Source: 1990 AACS.

R 408.12023

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Source: 1990 AACS.

R 408.12024

Source: 1990 AACS.

R 408.12025

Source: 1990 AACS.

R 408.12026

Source: 1990 AACS.

R 408.12031

Source: 1990 AACS.

R 408.12032

Source: 1990 AACS.

R 408.12033

Source: 1990 AACS.

R 408.12034

Source: 1990 AACS.

R 408.12035

Source: 1990 AACS.

INSPECTION AND MAINTENANCE

R 408.12041

Source: 1990 AACS.

R 408.12042

Source: 1990 AACS.

R 408.12043

Source: 1990 AACS.

R 408.12044

Source: 1990 AACS.

R 408.12045

Source: 1990 AACS.

PART 21. POWERED INDUSTRIAL TRUCKS

R 408.12102 Rescission of OH rule 3225.

Rule 2102. OH rule 3225, which was incorporated by reference pursuant To section 14 of 1974 PA 154, MCL 408.1014, is rescinded.

History: 2000 MR 15, Eff. Sept. 28, 2000.

R 408.12103 Definitions; A to C.

Rule 2103. (1) "Attachment" means a device, other than conventional forks or load backrest extension, mounted permanently or removed on the elevating mechanism of a truck for handling the load. Popular attachments are fork extensions, clamps, rotating devices, side shifters, load stabilizers, rams, and booms.

(2) "Cantilever truck" means a self-loading counter-balanced or non-counter-balanced truck equipped with cantilever load engaging means. (Appendix A, Fig. 1.)

(3) "Capacity" when referring to trucks, means:

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(a) The capacity of a truck equipped with a load carriage and forks, or with attachments, is the maximum weight in pounds, at a specified load center which the truck, based on the strength of its various components and applicable stability, can lift to the maximum elevation of the load engaging means. Alternate capacities may be established at the same specified load center and at less than maximum elevation of the load engaging means.

(b) The capacity of a truck equipped with a platform is the maximum weight in pounds, at a specified load center which the truck, based on the strength of its various components, can lift to the maximum elevation of the load engaging means.

(4) "Carriage" means a support structure for forks or attachment, generally roller mounted, traveling vertically within the mast of a cantilever truck.

(5) "Center-control truck" means a truck in which the operator's control position is located near the longitudinal center of the truck.

(6) "Counterbalanced truck" means a truck equipped with load engaging means wherein all the load during normal transporting is external to the polygon formed by the wheel contacts. (Appendix A, Fig. 1.)

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC.

R 408.12104 Rescinded.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12105 Definitions; D to F.

Rule 2105. (1) "Drift" means to move without control.

(2) "Electric truck" means a truck in which the principal energy is transmitted to motors in the form of electricity from a power source such as, but not limited to, a battery or motor generator.

(3) "End-control truck" means a truck in which the operator's position is located at the end opposite the load.

(4) "Fixed platform truck" means a truck equipped with a load platform which is non-elevating.

(5) "Forks" means horizontal tine-like projections, normally suspended from the carriage, for engaging and supporting loads.

(6) "Fork height" means the vertical distance from the floor to the load carrying surface adjacent to the heel of the forks with mast vertical, and in the case of a reach truck, with the forks extended.

(7) "Fork-lift truck" means a light-lift self-loading truck equipped with load carriage and forks for transporting and tiering loads.

(8) "Free play" means an uncontrolled movement.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC.

R 408.12106 Definitions; H to I.

Rule 2106. (1) "High-lift truck" means a self-loading truck equipped with an elevating mechanism designed to permit tiering. Popular types are high-lift fork trucks, high-lift ram trucks, high-lift boom trucks, high-lift clamp trucks, and high-lift platform trucks. (Appendix A, Fig. 1.)

(2) "High-lift platform truck" means a self-loading truck equipped with a load platform, intended primarily for transporting and tiering loaded skid platforms. (Appendix A, Fig. 2.)

(3) "Industrial crane truck" means a truck intended primarily for pick and carry use in warehousing, yarding, or industrial plant operation over improved or hard surfaced roads and yards, including maintenance within these areas.

(4) "Industrial tractor" means a truck designed primarily to draw 1 or more non-powered trucks, trailers, or other mobile loads. (Appendix A, Fig. 5.)

(5) "Internal combustion engine truck" means a truck in which the power source is a gas, LP gas, gasoline, or diesel type engine.

(6) "Issuing authority" means an employer or his OR HER designated representative who instructed and trained the operator.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC.

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R 408.12109. Definitions; O, P.

Rule 2109. (1) "Operator" means an employee who has been trained, tested, and authorized by the present employer to operate a powered industrial truck.

(2) "Order picker truck, high-lift" means a high-lift truck controlled by the operator stationed on a platform movable with the load engaging means and intended for manual stock selection. The truck may be capable of self-loading or tiering or both. (Appendix A, Fig. 9).

(3) "Overhead guard" means a framework fitted to a truck over the head of a riding operator.

(4) "Overall lowered mast height" means the maximum vertical dimension from the ground or floor to the extreme top point of the mast with the fork carriage in the fully lowered position and unloaded.

(5) "Pallet truck" means a self-loading low-lift truck equipped with wheeled forks of dimensions to go under a single faced pallet or between the top and bottom boards of a double faced pallet and having wheels capable of lowering into spaces between the bottom boards so as to raise the pallet off the floor for transportation. (Appendix A, Fig 4).

(6) "Parking brake" means a device to prevent the movement of a stationary truck.

(7) "Powered industrial truck" or "truck" means a mobile, power driven vehicle used to carry, push, pull, lift, stack, or tier material.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12110 Definitions; R to U.

Rule 2110. (1) "Reach truck" means a self-loading truck, generally high-lift, having load engaging means mounted so the means can be extended forwardly under control to permit a load to be picked up and deposited in the extended position and transported in the retracted position. (Appendix A, Fig. 7.)

(2) "Rough terrain forklift truck" means a wheeled-type truck which is designed primarily as a fork truck that has a vertical mast or pivoted boom, or both, which has variable fixed length reach and which may be equipped with attachments and that is intended for operation on unimproved natural terrain as well as the disturbed terrain of construction sites. A machine that is designed primarily for earth-moving, such as a loader or dozer, even though its buckets and blades are replaced with forks or a machine that is designed primarily as an over-the-road truck that has a lifting device, is not a rough terrain forklift truck.

(3) "Self-loading" means the capability of a truck to pick up, carry, set down and, in the case of high-lift types to stack or tier its load without the aid of external means.

(4) "Service brake" means a device designed to bring a moving truck to a halt.

(5) "Side loader" means a self-loading truck, generally high-lift, having load engaging means mounted in such a manner that the means can be extended laterally under control to permit a load to be picked up and deposited in the extended position and transported in the retracted position. (Appendix A, Fig. 8.)

(6) "Straddle truck" means a general class of cantilever truck with horizontal structural wheel supported members extending forward from the main body of the truck, generally high-lift, for picking up and hauling loads between its outrigger arms. (Appendix A, Fig. 10.)

(7) "Tire" means a tire which may be standard solid, cushion solid, pneumatic or solid pneumatic style.

(8) "Tiering" means a process of placing a load on or above another load.

(9) "Unattended truck" means a truck which is beyond the vision or more than 25 feet from the operator, whichever is less.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12111 Adoption of standards.

Rule 2111. (1) A powered industrial truck manufactured after January 15, 1971, but before 1993, shall be certified by the manufacturer that the truck covered by this part has been produced according to the mandatory requirements of section 3 and 4, except subsection 421 of section 4, of the ANSI standard B56.1-1969 "safety standards for powered industrial trucks."

(2) A low lift or high lift truck manufactured after the effective date of this part shall be in compliance with the requirements of the ANSI standard B56.1-1993 "safety standard for low lift and high lift trucks", except as noted in subrule (1) of this rule.

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(3) A rough terrain fork lift truck manufactured after the effective date of this part shall be in compliance with the requirements of ANSI standard B56.6-1992 "rough terrain fork lift trucks."

(4) A industrial crane truck manufactured after the effective date of this part shall be in compliance with ANSI standard B56.7-1987 "safety standard for industrial crane trucks."

(5) A tow tractor manufactured after the effective date of this part shall be in compliance with ANSI standard B56.9-1992 "operator controlled industrial tow tractors."

(6) A manually propelled high lift industrial truck manufactured after the effective date of this part shall be in compliance with ANSI standard B56.10-1992 "manually propelled high lift industrial trucks."

(7) The standards specified in this rule are adopted by reference. These standards may be purchased from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, USA, telephone number: 1-800-854-7179 and web-site glbal@his.com at a cost of respectively, \$97.00, \$77.00, \$56.00, \$56.00, and \$70.00, as of the time of the adoption of these rules, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan, 48909.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12121 Rescinded.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 89, Eff. Nov. 13, 1976; 1979 AC.

R 408.12130 Rescinded.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12132 Modifications.

Rule 2132. (1) The employer shall not install an additional counterweight without written assurance from the manufacturer of the truck that the truck will meet the stability requirements of ANSI standard B56.1-1993 "safety standard for low lift and high lift trucks."

(2) An employer shall not make other modifications affecting capacity or safety without written approval of the manufacturer or an engineer knowledgeable on the subject. Capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.

(3) If the truck is equipped with front-end attachments, the nameplate shall be marked to show all of the following:

(a) Identification of the attachments.

(b) The approximate weight of the truck and attachment.

(c) The load capacity of the truck and attachment combination at maximum elevation of the load engaging means with load laterally centered.

History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1979 AC.

R 408.12134 Parking brakes; tires.

Rule 2134. (1) The parking brake on a sit-down rider truck shall be capable of holding the truck on the maximum grade which the truck can negotiate with rated load, or on a 15% grade, whichever is lesser. The parking brake shall be manually or automatically applied and shall remain applied until released by the operator.

(2) Tires shall be used as recommended by the truck manufacturer.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1979 AC.

R 408.12135 Rescinded.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1979 AC.

R 408.12136. Operator platforms.

Rule 2136. (1) An end control, reach, narrow aisle, order picker high-lift, order picking and stacking, and motorized hand rider truck shall be equipped with a platform extended beyond the operator's position, and

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shall withstand a compression load equal to the weight of the loaded vehicle applied along the longitudinal axis of the truck with the outermost projection of the platform against a flat vertical surface. The back protective guard where provided shall permit rapid and unobstructed ingress or egress from the platform.

(2) On a double end control baggage type truck or a truck which may be transported on short elevators, means shall be provided to prevent accidental folding of the operator's folding platform.

(3) All of the following apply to an order picker truck, high-lift:

(a) A removable operator platform shall be provided with a device that attaches the platform to the lifting means.

(b) The operator platform shall be equipped with side guardrails.

(c) When the platform is elevated, the horizontal travel speed of the truck shall be automatically reduced to a degree necessary to maintain stability under maximum braking load and turning.

(d) Subdivisions (a) and (c) of this subrule pertain only to a truck manufactured after the effective date of this part. (Note: The effective date was January 15, 1971.)

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12137. Steering control.

Rule 2137. (1) An employer shall assure that, except on a motorized hand and motorized hand or rider truck, the steering control of a powered industrial truck is contained within the outlines of the planes of the truck, or guarded to prevent injury to the operator during movement of the controls when passing an obstacle such as a wall, post, equipment, box, or other truck.

(2) An employer shall assure that on a motorized hand and motorized hand or rider truck, the steering handle is provided with a guard or device to protect the operator's hands from injury when passing an obstacle such as a wall, post, equipment, box, or another truck.

History: 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12138. Load handling controls, general.

Rule 2138. All of the following apply to a load handling control on a truck:

(a) Is preferably located for right hand operation.

(b) Is a single lever used to perform more than one function. Push button or pre-selected controls shall be properly identified.

(c) Is clearly and durably identified to indicate function and direction of motion of load or equipment.

(d) Is self-centering.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 89, Eff. Nov. 13, 1976; 1979 AC.

R 408.12143

Source: 1983 AACS.

R 408.12151. Operator selection.

Rule 2151. (1) An employer shall assure that an employee assigned to operate a powered industrial truck shall meet the following minimum requirements, except as noted in subrule (3) of this rule:

(a) Have corrected vision that meets the same requirements as those for a valid Michigan driver's license. Evidence of meeting this requirement shall be a Michigan driver's license or a doctor's certificate.

(b) Have effective use of all 4 limbs, unless the powered industrial truck has been modified, as prescribed in R 408.12132, to permit operation with fewer than 4 limbs. A prosthetic device is considered a limb when capable of being used to effectively operate the controls.

(c) Be of a height sufficient to operate the controls and have an unobstructed view over the controls and dashboard.

(d) Have coordination between eyes, hands, and feet.

(e) Have freedom from known convulsive disorders and episodes of unconsciousness for a period of 1 year before obtaining a powered industrial truck operator's permit or a lesser time with the assurance from a neurologist that the disorders or episodes are under control.

(f) Have the ability to understand signs, labels, and instructions.

(2) An employer shall assure that an employee assigned to operate a powered industrial truck shall meet the

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minimum requirements stated in this rule and shall be retested not less than every 3 years.

(3) Requirements listed in subdivisions (b) and (c) of subrule (1) of this rule and of subrule (2) of this rule are optional for operators of a motorized hand low lift truck.

(4) An employee who was operating a powered industrial truck before November 9, 1972, but does not meet the requirements of subdivisions (a), (b), (c), and (d) of subrule (1) of this rule and of subrule (2) of this rule, may be continued as an operator if the handicap or inability does not prove detrimental to the assigned task.

History: 1954 ACS 66, Eff. Jan. 15, 1971; 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12152. Training.

Rule 2152. (1) An employer shall provide training to the employee before the employee's assignment as an operator of a powered industrial truck. Instruction shall include all of the following:

(a) Capacities of the equipment and attachments.

(b) Purpose, use, and limitations of controls.

(c) How to make daily checks.

(d) Practice and operating assigned vehicles through the mechanical functions necessary to perform the required job.

(e) State safety standard rules 2171 to 2193 of Part 21 "powered industrial trucks," being R 408.12171 to R 408.12193 of the Michigan Administrative Code.

(f) Hazards associated with exhaust gases produced by fossil fuel powered industrial trucks (e.g. carbon monoxide, components of diesel exhaust), and hazards associated with the handling of electrolyte chemicals used for battery operated trucks (e.g. sulphuric acid), shall be provided in accordance with the Michigan Right To Know Law, "hazards communications" standards 29 C.F.R. §1910.1200 as adopted by R 408.19202 and R 325.77002.

(2) Training shall consist of a combination of formal instruction (e.g. lecture, discussion, interactive computer learning, videotape, written material), practical training, and testing of the operator's performance in the workplace as required in R 408.12153.

(3) Refresher training in relevant topics shall be provided to an operator under any of the following conditions:

(a) An operator has been observed to operate the vehicle in an unsafe manner.

(b) An operator has been involved in an accident or a near-miss incident.

(c) An operator has received an evaluation that reveals that the operator is not operating the truck safely.

(d) An operator is assigned to a different type of truck.

(e) A condition in the workplace changes that could affect safe operation of the truck.

(4) An evaluation of each operator's performance shall be conducted before renewal of a truck operator permit. An individual who is authorized by the employer and who has the knowledge, training, and experience to train and evaluate the competence of the operator shall provide training and evaluation.

History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12153

Source: 1983 AACS.

R 408.12154. Permits.

Rule 2154. (1) An employer shall provide the employee with a permit to operate a powered industrial truck only after meeting the requirements prescribed in R 408.12151, R 408.12152, and R 408.12153. A permit is optional for operators of motorized hand low lift trucks.

(2) An employee being trained is exempt from the permit requirement for a period of not more than 30 days, provided the employee is under the supervision of an individual who is authorized by the employer and who has the knowledge, training, and experience to train operators and to evaluate their competence, and that the training period does not endanger the trainee or other employees.

(3) A permit shall be carried by the operator or be available upon request by a department representative at all times during working hours.

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- (4) A permit shall indicate the type of truck an operator has been trained on and is qualified to operate.
- (5) A permit to operate a powered industrial truck shall be valid only with the employer who issued the permit, and the permit shall be issued for a period of not more than 3 years and shall be consistent with subrule (2) of R 408.12151. An employee who is exempt under subrule (4) of R 408.12151 may continue to operate a powered industrial truck if the employee's handicaps or inabilities do not prove detrimental to his or her task.
- (6) A permit shall contain the following information (see sample permit):
- (a) Firm name.
 - (b) Operator's name.
 - (c) Operator I.D. number, if any.
 - (d) Name of issuing authority.
 - (e) Type of truck authorized to operate.
 - (f) Operator restrictions, if any. The permit shall state the nature of the restriction.
 - (g) Date issued.
 - (h) Date expiring.
- (7) A sample permit is set forth as follows:

SAMPLE PERMIT

INDUSTRIAL TRUCK OPERATOR PERMIT

(firm name)

OPERATOR'S NAME OPERATOR'S NUMBER IS AUTHORIZED TO OPERATE: *(insert type of truck(s) authorized)*

RESTRICTIONS: *(explanation of restrictions)*

DATE ISSUED: (month - day- year)

DATE EXPIRING: (month - day- year)

BY ISSUING AUTHORITY:

TITLE

- (8) If a restricted permit to operate is issued, the permit shall state the nature of the restriction.
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12155 Restriction of use.

Rule 2155. (1) A powered industrial truck used in an environment containing the following substances shall be equipped as prescribed in the National Fire Protection Association standard, 505-1996, "type designations, areas of use, conversions, maintenance, and operation of powered industrial trucks," incorporated herein by reference:

- (a) Gases or vapors, such as but not limited to acetylene, hydrogen, oxygen, ether, gasoline, naphtha, or acetone, which may be present in quantities sufficient to produce an explosive or ignitable mixture.
 - (b) Combustible mixtures of dusts such as, but not limited to, metal dust, coal dust, coke dust, grain dust, flour dust, or organic dust.
 - (c) Ignitable fibres such as, but not limited to, baled waste, cocoa fibre, cotton, excelsior, kapok, or oakum.
- The standard is available for inspection at the Lansing office of the department of consumer and industry services. This standard may be purchased from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts, 02322, telephone number: 1-800-344-3555 and web-site www.nfpa.org at a cost as of the time of adoption of this rule of \$19.50, or from the Michigan Department of Consumer and Industry

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Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.
History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 89, Eff. Nov. 15, 1976; 1979 AC.

R 408.12161

Source: 1980 AACS.

R 408.12162

Source: 1983 AACS.

R 408.12163 Fuel.

Rule 2163. (1) An employer shall provide safety fuel cans where trucks are refueled with gasoline at other than a gas pump area.

(2) An employer shall provide a special area for refueling that is not less than 25 feet from a source of open flame or spark and the area shall be posted to this effect.

(3) Use and storage of LP gas shall be as specified by 29 C.F.R. §1910.110, "storage and handling of liquefied petroleum gases," which was adopted by reference in general industry safety standard part 56 "storage and handling of liquefied petroleum gases," being R 408.15601 et seq. This standard is available from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(4) Handling and storage of fuel, such as gasoline and diesel fuel, shall be as prescribed by 29 C.F.R. §1910.106, "flammable and combustible liquids," which was adopted by reference in general industry safety standard part 75 "flammable and combustible liquids," being R 408.17501 et seq. This standard is available from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(5) Smoking while refueling is prohibited.

(6) Fuel level shall not be checked by use of an open flame.

(7) An employer shall ensure that an employee is protected from exposure to airborne contaminants created in exhaust gases (e.g. carbon monoxide) of fossil fuel powered industrial trucks, as required by R 325.51101 et seq., "air contaminants".

History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12164 Electric trucks.

Rule 2164. (1) Where electric trucks are used, an employer shall provide a designated area for battery changing, charging, or both, which shall be performed by a trained and authorized employee.

(2) Provisions shall be made in a battery charging area where batteries are removed from the truck for flushing and neutralization of spillage, for fire protection, and for air movement sufficient to disperse fumes from gassing batteries.

(3) Smoking and other sources of ignition is prohibited in these areas.

(4) An employer shall assure that an employee shall be trained to position the truck and apply the brake before changing or charging a battery and to position and secure a reinstalled battery before releasing the truck for use.

(5) Material handling equipment, such as, but not limited to, a conveyor or overhead hoist, shall be used for removing and replacing a battery. A spreader bar or an equivalent device shall be used with any overhead battery hoist so that the lifting stresses are vertical. A chain type powered battery hoist shall have a container to accumulate the excess lifting chain. When a hand hoist is used, an uncovered battery shall be covered to prevent the hand chain from shorting on cell connectors or terminals. Tools and other metallic objects shall be kept away from the terminals.

(6) When mixing electrolyte for a battery, an employer shall ensure the use of a carboy tilter or siphon for handling electrolyte. Acid concentrate shall be poured into water; water shall not be poured into acid concentrate.

(7) The following apply to charging a battery:

(a) The vent cap shall be kept in place and functioning.

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- (b) The battery or compartment covers where provided shall be kept open to dissipate heat and gases.
 - (8) The electrolyte level shall not be checked with an open flame.
 - (9) Where there is a potential for employee exposure to injurious corrosive electrolyte solutions (e.g. sulfuric acid) associated with battery powered industrial trucks, the employer shall provide both of the following:
 - (a) Personal protective equipment in accordance with occupational health part 433, R 325.60001 et seq., "personal protective equipment" or general industry part 33, R 408.13301 et seq., "personal protective equipment".
 - (b) Suitable facilities for quick drenching or flushing of eyes and body within the work area for immediate emergency use in accordance with occupational health part 440, O.H. 4401 "medical services and first aid".
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1979 AC.

R 408.12171. Daily checks.

- Rule 2171. (1) At the start of each shift, the operator of a powered industrial truck or a qualified employee shall perform daily checks of the equipment as required by the employer. See appendix B for suggested inspection checklist.
- (2) An employer shall ensure that any defects that would affect the safe operation of the equipment shall be repaired before use.
 - (3) An operator shall promptly report any defect on the powered industrial truck to the employer.
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12172. General operating rules.

- Rule 2172. (1) An operator shall safeguard other employees at all times.
- (2) An operator shall not drive a truck up to anyone who is standing in front of a fixed object.
 - (3) An operator shall not allow anyone to stand or pass under the elevated portion of any powered industrial truck, whether loaded or empty.
 - (4) No employee, except the operator, shall ride on a powered industrial truck unless the truck is provided with a passenger seat. Passenger seats on a fork lift truck shall be under the overhead guard.
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC.

R 408.12173. Position of arms and legs.

- Rule 2173. An employee shall not place his or her arms or legs in either of the following positions:
- (a) Between the uprights of the mast.
 - (b) Outside the running lines of a moving truck.
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12176. Loading trucks, trailers, and railcars.

- Rule 2176. (1) An employer shall ensure that a highway truck and trailer shall not be boarded by a powered industrial truck before the highway truck and trailer has its brakes set and not less than 2 wheels blocked or be restrained by other mechanical means installed in a manner that will hold the trailer from movement.
- (2) An employer shall ensure that wheel stops, hand brakes, or other approved positive protection to prevent railroad cars from moving during loading or unloading operations are provided, and before and while dockboards or bridge plates are in position.
 - (3) Provisions shall be made to isolate rail cars during switching operations as required by R 408.10026, "general provisions."
 - (4) An employer shall ensure that the landing gear of all semi-trailers are visually inspected immediately before the trailer is uncoupled from the tractor to assure ability of the landing gear to support the imposed load.
 - (5) A semitrailer less than 30 feet in length, when not coupled to a tractor and being loaded or unloaded with a powered industrial truck, shall be provided a support capable of sustaining the load at the front.
 - (6) An employer shall ensure that the flooring of trucks, trailers, and railroad cars are checked for breaks and weakness before they are driven onto.
- History: 1954 ACS 73, Eff. Nov. 10, 1972; 1954 ACS 81, Eff. Nov. 19, 1974; 1954 ACS 89, Eff. Nov. 13,

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1976; 1979 AC; 1979 ACS 14, Eff. Mar. 18, 1983.

R 408.12177

Source: 1983 AACS.

R 408.12179

Source: 1983 AACS.

R 408.12183

Source: 1983 AACS.

R 408.12184

Source: 1983 AACS.

R 408.12190

Source: 1983 AACS.

PART 23. HYDRAULIC POWER PRESSES

R 408.12336

Source: 1997 AACS.

PART 24. MECHANICAL POWER PRESSES

R 408.12401

Source: 1990 AACS.

R 408.12403

Source: 1990 AACS.

R 408.12404

Source: 1990 AACS.

R 408.12407

Source: 1990 AACS.

R 408.12411

Source: 1993 AACS.

R 408.12412

Source: 1993 AACS.

R 408.12413

Source: 1990 AACS.

R 408.12428

Source: 1990 AACS.

R 408.12442

Source: 1990 AACS.

R 408.12443

Source: 1990 AACS.

SAFEGUARDING THE POINT OF OPERATION

R 408.12461

Source: 1990 AACS.

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R 408.12463

Source: 1993 AACS.

DIE DESIGN, CONSTRUCTION, SETTING, AND FEEDING

R 408.12471

Source: 1990 AACS.

R 408.12472

Source: 1990 AACS.

R 408.12473

Source: 1990 AACS.

R 408.12474

Source: 1990 AACS.

R 408.12477

Source: 1990 AACS.

PART 25. MANLIFTS

R 408.12501

Source: 1997 AACS.

PART 26. METALWORKING MACHINERY

R 408.12605

Source: 1991 AACS.

R 408.12607

Source: 1991 AACS.

R 408.12613

Source: 1997 AACS.

R 408.12614

Source: 1991 AACS.

R 408.12615

Source: 1997 AACS.

R 408.12617

Source: 1997 AACS.

R 408.12620

Source: 1991 AACS.

R 408.12633

Source: 1991 AACS.

R 408.12635

Source: 1991 AACS.

R 408.12636

Source: 1991 AACS.

R 408.12639

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Source: 1991 AACS.

R 408.12640

Source: 1991 AACS.

R 408.12641

Source: 1991 AACS.

R 408.12642

Source: 1991 AACS.

R 408.12646

Source: 1991 AACS.

R 408.12650

Source: 1991 AACS.

PART 27. WOODWORKING MACHINERY

R 408.12715

Source: 1997 AACS.

R 408.12716

Source: 1997 AACS.

R 408.12718

Source: 1981 AACS.

R 408.12727

Source: 1981 AACS.

R 408.12728

Source: 1983 AACS.

R 408.12730

Source: 1983 AACS.

R 408.12751

Source: 1981 AACS.

R 408.12793

Source: 1981 AACS.

R 408.12798

Source: 1983 AACS.

PART 31. PERSONAL PROTECTIVE EQUIPMENT

R 408.13101—R 408.13135

Source: 1997 AACS.

PART 32. HEAD PROTECTION EQUIPMENT

R 408.13201

Source: 1997 AACS.

R 408.13203

Source: 1997 AACS.

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R 408.13205
Source: 1997 AACS.

R 408.13211
Source: 1997 AACS.

R 408.13221
Source: 1997 AACS.

R 408.13222
Source: 1997 AACS.

R 408.13231
Source: 1997 AACS.

R 408.13241
Source: 1997 AACS.

PART 33. PERSONAL PROTECTIVE EQUIPMENT

R 408.13301
Source: 1983 AACS.

R 408.13302
Source: 1983 AACS.

R 408.13303
Source: 1983 AACS.

R 408.13304
Source: 1983 AACS.

R 408.13305
Source: 1983 AACS.

R 408.13306
Source: 1983 AACS.

R 408.13308
Source: 1995 AACS.

R 408.13309
Source: 1995 AACS.

R 408.13310
Source: 1997 AACS.

FACE AND EYE PROTECTION

R 408.13311
Source: 1997 AACS.

R 408.13312
Source: 1997 AACS.

R 408.13313
Source: 1983 AACS.

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R 408.13320
Source: 1983 AACS.

R 408.13321
Source: 1983 AACS.

R 408.13322
Source: 1983 AACS.

R 408.13323
Source: 1983 AACS.

R 408.13324
Source: 1995 AACS.

R 408.13325
Source: 1983 AACS.

R 408.13327
Source: 1983 AACS.

R 408.13329
Source: 1983 AACS.

R 408.13330
Source: 1983 AACS.

R 408.13332
Source: 1983 AACS.

R 408.13340
Source: 1983 AACS.

R 408.13342
Source: 1983 AACS.

R 408.13343
Source: 1983 AACS.

R 408.13344
Source: 1983 AACS.

R 408.13345
Source: 1983 AACS.

R 408.13346
Source: 1983 AACS.

R 408.13347
Source: 1983 AACS.

EYE PROTECTORS

R 408.13350
Source: 1997 AACS.

R 408.13352
Source: 1983 AACS.

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R 408.13353
Source: 1983 AACS.

R 408.13355
Source: 1983 AACS.

R 408.13356
Source: 1983 AACS.

R 408.13357
Source: 1983 AACS.

R 408.13359
Source: 1983 AACS.

R 408.13360
Source: 1983 AACS.

R 408.13362
Source: 1983 AACS.

R 408.13363
Source: 1983 AACS.

R 408.13364
Source: 1983 AACS.

R 408.13366
Source: 1983 AACS.

R 408.13367
Source: 1983 AACS.

R 408.13369
Source: 1983 AACS.

HEAD PROTECTION EQUIPMENT

R 408.13370
Source: 1997 AACS.

R 408.13372
Source: 1997 AACS.

R 408.13375
Source: 1995 AACS.

R 408.13376
Source: 1983 AACS.

R 408.13378
Source: 1983 AACS.

FOOT PROTECTION

R 408.13383
Source: 1997 AACS.

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R 408.13384
Source: 1983 AACS.

R 408.13385
Source: 1997 AACS.

R 408.13386
Source: 1983 AACS.

ELECTRICAL PROTECTIVE EQUIPMENT

R 408.13387
Source: 1997 AACS.

R 408.13390
Source: 1997 AACS.

HAND PROTECTION

R 408.13392
Source: 1995 AACS.

R 408.13394
Source: 1997 AACS.

R 408.13398
Source: 1983 AACS.

PART 35. FACE AND EYE PROTECTION

R 408.13501—R 408.13569
Source: 1997 AACS.

PART 37. ACCIDENT PREVENTION SIGNS AND TAGS

TAGS

R 408.13703
Source: 1983 AACS.

R 408.13707
Source: 1983 AACS.

R 408.13708
Source: 1983 AACS.

R 408.13711
Source: 1983 AACS.

R 408.13713
Source: 1983 AACS.

R 408.13714
Source: 1983 AACS.

R 408.13715
Source: 1983 AACS.

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R 408.13716
Source: 1983 AACS.

R 408.13717
Source: 1997 AACS.

R 408.13718
Source: 1997 AACS.

R 408.13721
Source: 1983 AACS.

R 408.13722
Source: 1997 AACS.

R 408.13731
Source: 1988 AACS.

R 408.13732
Source: 1983 AACS.

R 408.13733
Source: 1983 AACS.

R 408.13734
Source: 1983 AACS.

R 408.13735
Source: 1983 AACS.

R 408.13736
Source: 1997 AACS.

PART 38. HAND AND PORTABLE POWERED TOOLS

R 408.13811
Source: 1993 AACS.

R 408.13812
Source: 1993 AACS.

R 408.13821
Source: 1983 AACS.

R 408.13822
Source: 1983 AACS.

R 408.13823
Source: 1983 AACS.

R 408.13832
Source: 1997 AACS.

R 408.13847
Source: 1983 AACS.

R 408.13861
Source: 1983 AACS.

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R 408.13865
Source: 1983 AACS.

R 408.13871
Source: 1983 AACS.

R 408.13872
Source: 1983 AACS.

R 408.13873
Source: 1983 AACS.

R 408.13874
Source: 1983 AACS.

R 408.13875
Source: 1983 AACS.

R 408.13876
Source: 1997 AACS.

R 408.13881
Source: 1983 AACS.

R 408.13882
Source: 1993 AACS.

PART 39. DESIGN SAFETY STANDARDS FOR ELECTRICAL SYSTEMS

R 408.13901
Source: 1994 AACS.

R 408.13902
Source: 1994 AACS.

PART 40. SAFETY-RELATED WORK PRACTICES

R 408.14001
Source: 1992 AACS.

R 408.14002
Source: 1992 AACS.

R 408.14003
Source: 1992 AACS.

R 408.14004
Source: 1992 AACS.

R 408.14005
Source: 1992 AACS.

R 408.14006
Source: 1992 AACS.

R 408.14007
Source: 1992 AACS.

R 408.14008

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Source: 1992 AACS.

R 408.14009
Source: 1992 AACS.

PART 42. FORGING

R 408.14204
Source: 1989 AACS.

R 408.14221
Source: 1997 AACS.

R 408.14225
Source: 1997 AACS.

R 408.14232
Source: 1989 AACS.

PART 44. FOUNDRIES

R 408.14421
Source: 1988 AACS.

R 408.14423
Source: 1997 AACS.

R 408.14425
Source: 1997 AACS.

R 408.14426
Source: 1997 AACS.

R 408.14427
Source: 1997 AACS.

R 408.14431
Source: 1997 AACS.

R 408.14433
Source: 1988 AACS.

R 408.14436
Source: 1988 AACS.

R 408.14438
Source: 1997 AACS.

R 408.14447
Source: 1997 AACS.

R 408.14451
Source: 1988 AACS.

R 408.14461
Source: 1988 AACS.

R 408.14463
Source: 1988 AACS.

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R 408.14465
Source: 1988 AACS.

R 408.14466
Source: 1988 AACS.

R 408.14471
Source: 1988 AACS.

R 408.14474
Source: 1997 AACS.

R 408.14477
Source: 1997 AACS.

R 408.14478
Source: 1988 AACS.

R 408.14479
Source: 1997 AACS.

R 408.14481
Source: 1997 AACS.

R 408.14483
Source: 1997 AACS.

R 408.14485
Source: 1997 AACS.

R 408.14486
Source: 1997 AACS.

R 408.14488
Source: 1988 AACS.

R 408.14492
Source: 1988 AACS.

R 408.14493
Source: 1988 AACS.

R 408.14494
Source: 1997 AACS.

R 408.14496
Source: 1997 AACS.

PART 45. DIE CASTING

R 408.14511
Source: 1983 AACS.

R 408.14515
Source: 1997 AACS.

R 408.14517
Source: 1997 AACS.

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EQUIPMENT INSTALLATION AND MAINTENANCE

R 408.14521

Source: 1997 AACs.

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BUREAU OF SAFETY AND REGULATION

GENERAL INDUSTRY SAFETY STANDARDS COMMISSION

PART 49. SLINGS

R 408.14913 Rescinded.

History: 1954 ACS 89, Eff. Nov. 13, 1976; 1979 AC; rescinded 1999 MR 4, Eff. Apr. 21, 1999.

R 408.14923 Alloy steel chain slings; inspections; records; removal from service; proof testing.

Rule 4923. (1) In addition to the inspection prescribed by R 408.14912, an employer shall designate an employee to make a thorough periodic inspection of an alloy steel chain sling in use on a regular basis. An employer shall determine the regularity of inspection based on all of the following factors:

- (a) Frequency of sling use.
 - (b) Severity of service conditions.
 - (c) Nature of lifts being made.
 - (d) Experience gained on the service life of slings used in similar circumstances. The designated employee shall inspect an alloy steel chain sling at least once every 12 months.
- (2) The employer shall make and maintain a record of the most recent month in which each alloy steel chain sling was thoroughly inspected and shall make the record available for examination.
- (3) The employee designated to make the inspection of an alloy steel chain sling shall make a thorough inspection for all of the following:
- (a) Wear.
 - (b) Defective welds.
 - (c) Deformation.
 - (d) An increase in length beyond acceptable limits established in this part. If the defects or deteriorations are present, then the designated employee shall immediately remove the sling from service.
- (4) The employer shall ensure that, before use, each new, repaired, or reconditioned alloy steel chain sling, including all welded components in the sling assembly, is proof-tested by the sling manufacturer in accordance with ANSI/ASME standard B-30.9-1990, slings. The standard is adopted by reference in these rules and may be inspected at the Lansing office of the Michigan Department of Consumer and Industry Services. The standard may be purchased at the cost of \$90.00 as of time of adoption of this rule from the American National Standards Institute, 1430 Broadway Avenue, New York, New York 10018, or the Michigan Department of Consumer and Industry Services, State Secondary Complex, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909. The employer shall retain a certificate of the proof test and shall make it available for examination.
- (5) If the chain size at any point of any link is less than that prescribed in table 1, then the designated employee shall remove the sling from service.

TABLE 1

**Minimum Allowable Chain
Size At Any Point of Link**

Chain Size, Inches	Minimum Allowable Chain Size, Inches
1/4	3/64
3/8	9/64

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1/2	25/64
5/8	31/64
3/4	19/32
7/8	45/64
1	13/16
1-1/8	29/32
1-1/4	1
1-3/8	13/32
1-1/2	1-3/16
1-3/4	1-13/32

History: 1954 ACS 89, Eff. Nov. 13, 1976; 1979 AC; 1999 MR 4, Eff. Apr. 21, 1999.

PART 51. LOGGING

GENERAL PROVISIONS

R 408.15101

Source: 1996 AACS.

R 408.15105

Source: 1996 AACS.

R 408.15106

Source: 1996 AACS.

R 408.15107

Source: 1996 AACS.

R 408.15108

Source: 1996 AACS.

EMPLOYER-EMPLOYEE RESPONSIBILITIES

R 408.15112

Source: 1989 AACS.

R 408.15113

Source: 1989 AACS.

R 408.15114

Source: 1996 AACS.

R 408.15116

Source: 1989 AACS.

R 408.15117

Source: 1996 AACS.

R 408.15118

Source: 1996 AACS.

R 408.15119

Source: 1996 AACS.

PERSONAL PROTECTIVE EQUIPMENT

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R 408.15120
Source: 1996 AACS.

R 408.15122
Source: 1996 AACS.

R 408.15123
Source: 1996 AACS.

R 408.15124
Source: 1996 AACS.

R 408.15125
Source: 1996 AACS.

R 408.15127
Source: 1996 AACS.

PROTECTIVE EQUIPMENT

HAND-HELD CHAIN SAWS

R 408.15130
Source: 1996 AACS.

R 408.15131
Source: 1996 AACS.

R 408.15132
Source: 1997 AACS.

R 408.15133
Source: 1997 AACS.

R 408.15134
Source: 1997 AACS.

R 408.15135
Source: 1997 AACS.

R 408.15136
Source: 1996 AACS.

OTHER SAWS

R 408.15137
Source: 1989 AACS.

R 408.15138
Source: 1989 AACS.

LOGGING EQUIPMENT

R 408.15142
Source: 1996 AACS.

R 408.15143

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Source: 1989 AACs.

R 408.15144

Source: 1996 AACs.

R 408.15145

Source: 1997 AACs.

R 408.15146

Source: 1996 AACs.

R 408.15147

Source: 1997 AACs.

R 408.15148

Source: 1996 AACs.

R 408.15149

Source: 1996 AACs.

R 408.15150

Source: 1996 AACs.

FELLING, LIMBING, BUCKING, AND SKIDDING

R 408.15151

Source: 1996 AACs.

R 408.15153

Source: 1989 AACs.

R 408.15154

Source: 1989 AACs.

R 408.15155

Source: 1996 AACs.

R 408.15156

Source: 1996 AACs.

R 408.15157

Source: 1996 AACs.

R 408.15158

Source: 1996 AACs.

R 408.15159

Source: 1997 AACs.

LOADING AND DECKING

R 408.15161

Source: 1997 AACs.

R 408.15162

Source: 1997 AACs.

R 408.15163

Source: 1997 AACs.

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R 408.15164
Source: 1997 AACS.

TRUCK EQUIPMENT AND OPERATION

R 408.15171
Source: 1997 AACS.

R 408.15173
Source: 1997 AACS.

R 408.15174
Source: 1997 AACS.

R 408.15175
Source: 1996 AACS.

R 408.15180
Source: 1989 AACS.

R 408.15181
Source: 1989 AACS.

PART 52. SAWMILLS

R 408.15202
Source: 1989 AACS.

R 408.15203
Source: 1989 AACS.

R 408.15204
Source: 1989 AACS.

R 408.15205
Source: 1989 AACS.

R 408.15207
Source: 1989 AACS.

R 408.15211
Source: 1989 AACS.

R 408.15212
Source: 1989 AACS.

R 408.15222
Source: 1989 AACS.

R 408.15225
Source: 1989 AACS.

R 408.15226
Source: 1989 AACS.

SPECIFIC EQUIPMENT

R 408.15231

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Source: 1989 AACS.

R 408.15232

Source: 1989 AACS.

R 408.15233

Source: 1989 AACS.

R 408.15234

Source: 1989 AACS.

R 408.15241

Source: 1989 AACS.

R 408.15242

Source: 1989 AACS.

R 408.15246

Source: 1989 AACS.

R 408.15247

Source: 1989 AACS.

R 408.15262

Source: 1989 AACS.

LOG AND MATERIAL HANDLING AND STORAGE

R 408.15273

Source: 1989 AACS.

R 408.15274

Source: 1983 AACS.

R 408.15275

Source: 1997 AACS.

R 408.15277

Source: 1997 AACS.

PART 53. TREE TRIMMING AND REMOVAL

R 408.15313

Source: 1983 AACS.

PART 54. POWERED GROUNDSKEEPING EQUIPMENT

R 408.15411

Source: 1983 AACS.

R 408.15413

Source: 1983 AACS.

R 408.15415

Source: 1983 AACS.

R 408.15416

Source: 1983 AACS.

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R 408.15421

Source: 1997 AACS.

R 408.15422

Source: 1983 AACS.

R 408.15423—R 408.15425

Source: 1997 AACS.

R 408.15429

Source: 1983 AACS.

R 408.15431

Source: 1997 AACS.

R 408.15452

Source: 1983 AACS.

R 408.15461

Source: 1983 AACS.

PART 55. EXPLOSIVES

R 408.15501 Adoption of standard by reference.

Rule 5501. The provisions of 29 C.F.R. §1910.109 are adopted by reference in this rule, as published in 39 F.R. p. 23502, June 27, 1974, and as amended at 43 F.R. p. 49747, October 24, 1978; 45 F.R. p. 60704, September 12, 1980; 53 F.R. p. 12122, April 12, 1988; 57 F.R. p. 6403, February 24, 1992; 58 F.R. p. 16496, March 29, 1993; 58 F.R. p. 35309, June 30, 1993; 61 F.R. p. 9227, March 7, 1996; and 63 F.R. p. 33450, June 18, 1998.

History: 1979 ACS 10, Eff. May 18, 1982; 1998 MR 1, Eff. Feb. 7, 1998; 1999 MR 7, Eff. Jul. 23, 1999.

PART 56. STORAGE AND HANDLING OF LIQUEFIED PETROLEUM GASES

R 408.15601 Adoption of standard by reference.

Rule 5601. The provisions of 29 C.F.R. §1910.110 as published in the federal register on June 27, 1974, p. 23502, and as amended in the federal register on October 24, 1978, p. 49747; February 10, 1984, p. 5322; April 12, 1988, p. 12122; June 20, 1990, p. 25094; August 6, 1990, p. 32015; March 19, 1993, p. 15089; June 30, 1993, p. 35309; March 7, 1996, p. 9227; and June 18, 1998, p. 33450, are adopted by reference in this rule. The adopted regulations are available from the United States Department of Labor, Occupational Safety and Health Administration, 801 South Waverly, Room 306, Lansing, Michigan 48917, at no charge as of the time of adoption of this rule, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909, at no charge as of the time of adoption of this rule.

History: 1979 ACS 10, Eff. May 18, 1982; 2000 MR 11, Eff. Aug. 7, 2000.

PART 57. OIL AND GAS DRILLING AND SERVICING OPERATIONS

R 408.15701

Source: 1989 AACS.

R 408.15703

Source: 1989 AACS.

R 408.15704

Source: 1989 AACS.

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R 408.15705
Source: 1989 AACS.

R 408.15706
Source: 1989 AACS.

R 408.15707
Source: 1989 AACS.

R 408.15708
Source: 1989 AACS.

R 408.15711
Source: 1989 AACS.

R 408.15712
Source: 1989 AACS.

R 408.15713
Source: 1989 AACS.

R 408.15715
Source: 1989 AACS.

R 408.15718
Source: 1989 AACS.

R 408.15719
Source: 1989 AACS.

R 408.15721
Source: 1989 AACS.

R 408.15722
Source: 1989 AACS.

R 408.15723
Source: 1989 AACS.

R 408.15725
Source: 1989 AACS.

R 408.15726
Source: 1989 AACS.

EQUIPMENT

R 408.15731
Source: 1989 AACS.

R 408.15732
Source: 1989 AACS.

R 408.15734
Source: 1989 AACS.

R 408.15736
Source: 1989 AACS.

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R 408.15737
Source: 1994 AACS.

R 408.15739
Source: 1989 AACS.

R 408.15741
Source: 1989 AACS.

R 408.15743
Source: 1989 AACS.

R 408.15744
Source: 1989 AACS.

R 408.15745
Source: 1989 AACS.

R 408.15753
Source: 1989 AACS.

R 408.15754
Source: 1989 AACS.

R 408.15755
Source: 1997 AACS.

R 408.15756
Source: 1989 AACS.

R 408.15757
Source: 1989 AACS.

OTHER SPECIAL SERVICE OPERATIONS

R 408.15761
Source: 1989 AACS.

R 408.15762
Source: 1989 AACS.

R 408.15763
Source: 1997 AACS.

R 408.15764
Source: 1989 AACS.

R 408.15765
Source: 1997 AACS.

R 408.15766
Source: 1997 AACS.

R 408.15767
Source: 1997 AACS.

R 408.15768
Source: 1989 AACS.

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R 408.15769
Source: 1997 AACS.

R 408.15771
Source: 1989 AACS.

PART 58. VEHICLE-MOUNTED ELEVATING AND ROTATING WORK PLATFORMS

R 408.15803
Source: 1988 AACS.

R 408.15830
Source: 1988 AACS.

R 408.15831
Source: 1988 AACS.

R 408.15832
Source: 1988 AACS.

PART 59. HELICOPTERS

R 408.15915
Source: 1983 AACS.

PART 62. PLASTIC MOLDING

R 408.16201
Source: 1992 AACS.

R 408.16204
Source: 1992 AACS.

R 408.16206
Source: 1992 AACS.

R 408.16222
Source: 1992 AACS.

R 408.16223
Source: 1992 AACS.

R 408.16225
Source: 1992 AACS.

R 408.16226
Source: 1992 AACS.

R 408.16227 Lubrication and maintenance.

Rule 6227. (1) Lubrication of a machine shall be accomplished by 1 of the following:

- (a) Manually when the machine can be shut off and locked out.
 - (b) An automatic pressure or gravity feed system.
 - (c) An extension pipe leading to an area outside of the guards or away from any hazard.
- (2) In any case, R 408.10732, on lubrication of the general industry safety standards commission standard, Part 7. Guards for Power Transmission, shall apply.
- (3) Except as permitted in R 408.16234(10), each employee doing the work shall lock out the power source of the machine or equipment to be repaired or serviced if unexpected motion would cause injury. Any residual pressure which would be hazardous shall be relieved before and remain relieved during work by an employee

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doing the work.

History: 1954 ACS 76, Eff. Aug. 29, 1973; 1979 AC; 2000 MR 1, Eff. Feb. 9, 2000.

SPECIFIC EQUIPMENT

R 408.16231

Source: 1992 AACS.

R 408.16232

Source: 1992 AACS.

R 408.16234 Injection molding machinery.

Rule 6234. (1) An injection molding machine, except for one with a movable table that is subject to the provisions of subrule (4) of this rule, shall be equipped with a safety gate that is designed and constructed to prevent an employee from reaching into the point of operation, except when the gate is open.

(2) A safety gate on an injection molding machine that was manufactured after August 28, 1973, shall be interlocked with electrical, mechanical, and hydraulic or pneumatic devices, except as noted in subrule (9) of this rule.

(3) An injection molding machine that was manufactured on or before August 28, 1973, shall have the safety gate interlocked by any 2 of the following:

- (a) An electrical mold-closing control.
- (b) Hydraulic or pneumatic valves that control mold closing.
- (c) A mechanical device that prevents mold closing.

(4) An injection molding machine that uses a movable table to hold the lower mold shall be provided with a guard or device that is designed and constructed to deny an operator access to the point of operation during machine cycle.

(5) An injection molding machine shall be equipped with a fixed or an interlocked removable barrier that is designed and constructed to prevent an employee from reaching into the clamping mechanism.

(6) When purging an injection molding machine, an employee shall be protected from the purging splatter by a shield that is fixed, portable, or worn on the employee. The same guarding shall be used when servicing a heated runner manifold nozzle.

(7) An injection molding machine that uses an extruding machine that has an exposed feed screw shall have the screw guarded as prescribed by the provisions of R 408.16233(4).

(8) An electrically interlocked barrier shall be provided to cover the mold area opposite the operator on an injection molding machine that was manufactured after August 28, 1973. An injection molding machine that was manufactured on or before August 28, 1973, shall be provided with an interlocked or fixed barrier to cover the mold area opposite the operator.

(9) On injection molding machines that are powered by sources other than hydraulics or pneumatics, at least 1 additional electrical interlock shall also be provided. The interlock shall be independent of, and perform the same function as, the control specified in subrule (3)(a) of this rule.

(10) An employer shall ensure that routine mold changes on a horizontal injection molding machine are conducted in accordance with either of the following if the machine has an interlocked safety gate which complies with subrule (2) of this rule and an electrically interlocked barrier covering the mold area opposite the operator:

(a) On a horizontal injection molding machine which has a functional mechanical safety device plus two independent interlocks on the operator's gate and an emergency or other stop which shuts off the motor or motors which activate the clamping mechanism, the person changing the mold shall activate the emergency or other stop and lock the operator's gate in the open position. An employer shall ensure that the interlocks shall be checked and found to be functional and properly adjusted before beginning the mold change.

(b) On a horizontal injection molding machine which has two independent interlocks on the rear barrier which shut off the motor or motors which activate the clamping mechanism, the person changing the mold shall lock the rear barrier in the open position. An employer shall ensure that the interlocks are checked

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and found to be functional and properly adjusted before beginning the mold change.

History: 1954 ACS 76, Eff. Aug. 29, 1973; 1979 AC; 1992 MR 3, Eff. Apr. 2, 1992; 2000 MR 1, Eff. Feb. 9, 2000.

R 408.16235

Source: 1992 AACS.

R 408.16236

Source: 1992 AACS.

R 408.16242

Source: 1992 AACS.

R 408.16243

Source: 1992 AACS.

R 408.16245

Source: 1992 AACS.

R 408.16246

Source: 1992 AACS.

R 408.16251

Source: 1992 AACS.

PART 63. PULP, PAPER, AND PAPERBOARD MILLS

R 408.16305

Source: 1993 AACS.

R 408.16311

Source: 1993 AACS.

R 408.16313

Source: 1993 AACS.

R 408.16321

Source: 1993 AACS.

R 408.16328

Source: 1993 AACS.

R 408.16333

Source: 1983 AACS.

R 408.16351

Source: 1993 AACS.

R 408.16378

Source: 1981 AACS.

PART 69. COMPRESSED AIR AND GASES, EQUIPMENT, AND SYSTEMS

R 408.16901 Rescinded.

History: 1979 ACS 10, Eff. May 18, 1982; rescinded 2000 MR 11, Eff. Aug. 15, 2000.

R 408.16902 Adoption of standard by reference.

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Rule 6902. (1) The provisions of 29 C.F.R. §1910.101, as published in the Federal Register on June 27, 1974, p. 23502, and as amended on March 7, 1996, p. 9227 are adopted by reference in this rule.

(2) The provisions of 29 C.F.R. §1910.102, as published in the Federal Register on June 27, 1974, p. 23502, and as amended on March 7, 1996, p. 9227 are adopted by reference in this rule.

(3) The provisions of 29 C.F.R. §1910.103, as published in the Federal Register on June 27, 1974, p. 23502, and as amended on October 24, 1978, p.49746; April 12, 1988, p. 12121; August 6, 1990, p. 32015; June 30, 1993, p 35309; and March 7, 1996, p. 9227 are adopted by reference in this rule. The specifications for electrical equipment are contained in general industry safety standard part 39 "Design Safety Standards For Electrical Systems," being R408.13901 et seq. of the Michigan administrative code and general industry safety standard part 40 "Electrical Safety-related Work Practices," being R408.14001 et seq. of the Michigan administrative code.

(4) The provisions of 29 C.F.R. §1910.104, as published in the Federal Register on June 27, 1974, p. 23502, and as amended on October 24, 1978, p.49746; and March 7, 1996, p. 9227 are adopted by reference in this rule.

(5) The provisions of 29 C.F.R. §1910.105, as published in the Federal Register on June 27, 1974, p. 23502, and as amended on March 7, 1996, p. 9227 are adopted by reference in this rule.

(6) The adopted regulations are available from the United States Department of Labor, Occupational Safety and Health Administration, 801 South Waverly, Room 306, Lansing, Michigan, 48917, at no charge as of the time of adoption of these rules, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, at no charge as of the time of adoption of these rules

History: 2000 MR 11, Eff. Aug. 15, 2000.

Editor's Note: Pursuant to Section 56 of 1969 PA 306, as amended, being Section 24.256 of the Michigan Compiled Laws, an obvious error in this rule has been corrected at the request of the promulgating agency. The rule as published in the Michigan Register and filed with the Office of the Great Seal contained an incorrect reference in subsections (1), (2), and (3) to "p. 9227". The correct reference is to "p. 9236". The rule as published in the Michigan Register and filed with the Office of the Great Seal also contained an incorrect reference in subsections (4) and (5) to "p. 9227". The correct reference is to "p. 9237".

PART 71. LAUNDRY AND DRY CLEANING MACHINERY AND OPERATIONS

R 408.17111

Source: 1983 AACS.

R 408.17122

Source: 1981 AACS.

R 408.17123

Source: 1997 AACS.

R 408.17124

Source: 1997 AACS.

R 408.17125

Source: 1981 AACS.

R 408.17143

Source: 1981 AACS.

R 408.17147

Source: 1997 AACS.

PART 72. AUTOMOTIVE SERVICE OPERATIONS

R 408.17201

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Source: 1990 AACS.

R 408.17206

Source: 1990 AACS.

R 408.17235

Source: 1993 AACS.

R 408.17236

Source: 1990 AACS.

R 408.17237

Source: 1990 AACS.

R 408.17253

Source: 1990 AACS.

PART 73. FIRE BRIGADES

R 408.17301

Source: 1984 AACS.

R 408.17303 Definitions; A to E.

Rule 7303. (1) "Approved" means approval by the director of the department of consumer and industry services or his or her duly designated representative.

(2) "Approved label" means a label or other identifying mark of a nationally recognized testing laboratory, such as underwriters laboratory, inc. or factory mutual research corp., that maintains a periodic inspection of production of labeled equipment or materials and by whose labeling indicates compliance with nationally recognized standards or tests to determine suitable usage in a specified manner.

(3) "Education" means the process of imparting knowledge or skill through systematic instruction. "Education" does not require formal classroom instruction.

(4) "Enclosed structure" means a structure that has a roof or ceiling and not less than 2 walls that may present fire hazards to employees, such as accumulations of smoke, toxic gases, and heat similar to those found in buildings.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17305

Source: 1984 AACS.

R 408.17307

Source: 1984 AACS.

R 408.17309

Source: 1984 AACS.

R 408.17310 Employer responsibilities.

Rule 7310. (1) The employer having a fire brigade shall prepare and maintain a statement or written policy which establishes the existence of a fire brigade; and the basic organizational structure; the type, amount, and frequency of training to be provided to fire brigade members; the expected number of members in the fire brigade; and the functions that the fire brigade is to perform at the workplace. The organizational statement shall be available for inspection by the director of the department of consumer and industry services and by employees or their designated representatives.

(2) The employer shall assure that employees who are expected to do structural fire fighting are physically capable of performing duties which may be assigned to them during emergencies. The employer shall not permit employees with known heart disease, epilepsy, or emphysema to participate in fire brigade emergency activities unless a physician's certificate of the employees' fitness to participate in such activities

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is provided. For employees assigned to fire brigades before the effective date of this part, this rule is effective on September 15, 1985. For employees assigned to fire brigades after the effective date of this part, this rule applies.

(3) The employer shall provide training and education for all fire brigade members commensurate with those duties and functions that fire brigade members are expected to perform. Such training and education shall be provided to fire brigade members before they perform fire brigade emergency activities. Fire brigade leaders and training instructors shall be provided with training and education which is more comprehensive than that provided to the general membership of the fire brigade.

(4) The quality of training and education programs for fire brigade members shall be similar to the training and programs conducted by such fire training schools as any of the following:

- (a) Maryland fire and rescue institute.
- (b) Iowa fire service extension.
- (c) West Virginia fire service extension.
- (d) Georgia fire academy.
- (e) New York state department, fire prevention and control.
- (f) Louisiana state university firemen training program.
- (g) Michigan's Macomb community college, fire and emergency services training center.
- (h) Michigan's Great Lakes fire training institute at Kellogg community college.
- (i) Washington state's fire service training commission for vocational education.

(5) The training and education program for oil refinery industry fire brigade members shall be similar in quality to the training and education program conducted by any of the following:

- (a) Macomb community college of Michigan, fire and emergency services training center.
- (b) Michigan's Great Lakes fire training institute at Kellogg community college.
- (c) Texas A & M university.
- (d) Lamar university.
- (e) Reno fire school.
- (f) Delaware state fire school.

(6) Training for incipient fires shall be similar to the training provided by the fire training schools listed in Subrule (4) of this rule or to the fire training for incipient fires offered by the school of labor and industrial relations at Michigan state university.

(7) An employer shall assure that training and education is conducted frequently enough to ensure that each member of the fire brigade is able to perform the member's assigned duties and functions satisfactorily and in a safe manner so as not to endanger fire brigade members or other employees. All fire brigade members shall be provided with training at least annually. In addition, fire brigade members who are expected to perform interior structural fire fighting shall be provided with an education session or training at least quarterly.

(8) An employer shall inform fire brigade members about special hazards, such as the storage and use of flammable liquids and gases, toxic chemicals, radioactive sources, and water reactive substances, to which they may be exposed during a fire and other emergencies. The fire brigade members shall also be advised of any changes that occur in relation to the special hazards.

(9) An employer shall develop written procedures that describe the actions to be taken in situations involving special hazards and shall include these written procedures in the training and education program. An employer shall make the procedures available for inspection by fire brigade members.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 20, Eff. Dec. 20, 1999.

R 408.17312

Source: 1984 AACS.

R 408.17314 Personal protective equipment generally.

Rule 7314. (1) The following requirements apply to those employees who perform interior structural fire fighting. The requirements do not apply to employees who use fire extinguishers or standpipe systems to control or extinguish fires only in the incipient stage.

(2) An employer shall provide, and ensure the use of protective clothing that is in compliance with the

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requirements of this part. An employer shall provide the clothing without cost to an employee. An employer shall assure that protective clothing ordered or purchased after the effective date of this part meets the requirements contained in this part. As new equipment is provided, an employer shall assure that all fire brigade members wear the equipment when performing interior structural fire fighting. An employer shall provide foot and leg protection. An employer shall ensure that protective shoes or boots that are worn in combination with protective trousers meet the requirements of R 408.17316.

(3) The employer shall assure that protective clothing protects the head, body, and extremities, and consists of at least the following components: foot and leg protection; hand protection; body protection; face, eye, and head protection.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 20, Eff. Dec. 20, 1999.

R 408.17315 Foot and leg protection.

Rule 7315. (1) Foot and leg protection shall be provided and may be achieved by either of the following methods:

(a) Fully extended boots which provide protection for the legs.

(b) Protective shoes or boots worn in combination with protective trousers that meet the requirements of R 408.17316.

(2) An employer shall ensure that protective footwear meets the requirements of NFPA 1971-97, protective ensemble for structural fire fighting. NFPA 1971-97 is adopted by reference in these rules and may be purchased from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909, or from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101, (1-800-344-3555), at a cost as of the time of adoption of these rules of \$24.75.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17316. Body protection.

Rule 7316. (1) Body protection shall be coordinated with foot and leg protection to ensure full body protection for the wearer, which shall be achieved by 1 of the following methods:

(a) Wearing of a fire-resistive coat meeting the requirements of subrule (2) of this rule in combination with fully extended boots meeting the requirements of R 408.17315.

(b) Wearing of fire-resistive coat in combination with protective trousers both of which meet the requirements of subrule (2) of this section.

(2) The performance, construction, and testing of fire-resistive coats and protective trousers shall be at least equivalent to the requirements of the national fire protection association standard NFPA 1971-97, protective ensemble for structural fire fighting. NFPA 1971-97 is adopted by reference in R 408.17315(2).

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17317 Hand protection.

Rule 7317. Hand protection shall consist of protective gloves or a glove system that will provide protection against cuts, punctures, and heat penetration. Gloves or a glove system shall meet the requirements of NFPA 1971-97, protective ensemble for structural fire fighting. NFPA 1971-97 is adopted by reference in R 408.17315(2).

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17318 Head, eye, and face protection.

Rule 7318. (1) Head protection shall consist of a protective head device that has ear flaps and a chin strap which meet the performance, construction, and testing requirements of NFPA 1971-97, protective ensemble for structural fire fighting. NFPA 1971-97 is adopted by reference in R 408.17315(2).

(2) Protective eye and face devices that comply with R 408.13301 et seq. shall be used by fire brigade members when performing operations where the hazards of flying or falling materials are present and might cause eye and face injuries. Protective eye and face devices provided as accessories to protective head devices (face shields) are permitted if the devices meet the requirements of R 408.13301 et seq. The provisions of R 408.13301 et seq. are available from the Michigan Department of Consumer and Industry

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Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909.

(3) Full facepieces, helmets, or hoods of breathing apparatus that meet the requirements of R 408.13301 et. seq. are acceptable as meeting the eye and face protection requirements of this part.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17320 Respiratory protection devices.

Rule 7320. (1) An approved self-contained breathing apparatus that has a full facepiece shall be provided to and worn by fire service personnel while working in atmospheres where toxic products of combustion or an oxygen deficiency may be present. The apparatus shall also be worn during emergency situations involving toxic substances. An employer shall ensure that respirators are provided to and used by fire brigade members and that the respirators meet the requirements of 29 C.F.R. §1910.134 and this rule.

(2) Self-contained breathing apparatus shall have a minimum service life rating of 30 minutes in accordance with the methods and requirements of the national institute for occupational safety and health (NIOSH) except for escape self-contained breathing apparatus (ESCBA) used only for emergency purposes.

(3) All compressed air cylinders used with self-contained breathing apparatus shall meet department of transportation (DOT) requirements which are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 or the criteria of the national institute for occupational safety and health (NIOSH), Cincinnati Technical Center, 435 Elm Street, Suite 500, Cincinnati, Ohio 45202.

(4) Self-contained breathing apparatus shall be provided with an indicator that automatically sounds an audible alarm when the remaining service life of the apparatus is reduced to within a range of 20% to 25% of its rated service time.

(5) An employer shall ensure that self-contained breathing apparatus for use by fire service personnel is of the positive-pressure type. All breathing apparatus that is purchased after the effective date of these amendatory rules shall be in compliance with the national fire protection association standard NFPA 1981-87, open circuit self-contained breathing apparatus. NFPA 1981-87 is adopted by reference in these rules and is available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269, (1-800-344-3555), or from the Michigan Department of Consumer and Industry Services, Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these amendatory rules of \$14.50.

(6) Subrule (5) of this rule does not prohibit the use of a self-contained breathing apparatus if the apparatus can be switched from a demand mode to a positive-pressure mode when fire service personnel are performing emergency operations. However, the apparatus shall be in the positive-pressure mode as required in Subrule (7) of this rule.

(7) Negative-pressure self-contained breathing apparatus which has a rated service life of more than 2 hours and which has a minimum protection factor of 5,000, as determined by an acceptable quantitative fit test performed on each individual, is acceptable for use only during interior structural fire fighting situations for which the employer demonstrates that long-duration breathing apparatus is necessary. Quantitative fit test procedure shall be available for inspection by the director of the department of consumer and industry services or his or her authorized representative. Such negative-pressure breathing apparatus will continue to be acceptable for 18 months after a positive-pressure breathing apparatus that has the same or a longer rated service life is certified by the national institute for occupational safety and health (NIOSH). After the 18-month period, all self-contained breathing apparatus used for long-duration situations shall be of the positive-pressure type.

History: 1984 MR 2, Eff. Mar. 2, 1984; 1999 MR 12, Eff. Dec. 20, 1999.

R 408.17322 Rescinded.

History: 1984 MR 2, Eff. Mar. 2, 1984; rescinded 1999 MR 12, Eff. Dec. 20, 1999.

PART 74. FIRE FIGHTING

R 408.17402

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Source: 1988 AACS.

R 408.17403

Source: 1988 AACS.

R 408.17404

Source: 1988 AACS.

R 408.17411

Source: 1993 AACS.

R 408.17415

Source: 1988 AACS.

CONSTRUCTION AND USE OF EQUIPMENT

R 408.17421

Source: 1993 AACS.

R 408.17422

Source: 1988 AACS.

R 408.17423

Source: 1988 AACS.

R 408.17424

Source: 1988 AACS.

R 408.17426

Source: 1993 AACS.

PERSONAL PROTECTIVE EQUIPMENT

R 408.17431

Source: 1993 AACS.

R 408.17432

Source: 1993 AACS.

R 408.17433

Source: 1993 AACS.

R 408.17434

Source: 1993 AACS.

R 408.17435

Source: 1993 AACS.

R 408.17436 Respirator protection devices.

Rule 7436. (1) Approved self-contained breathing apparatus with a full facepiece or with an approved helmet or hood configuration shall be provided to and worn by fire service personnel while working in atmospheres where toxic products of combustion or an oxygen deficiency may be present. Such apparatus shall also be worn during emergency situations involving toxic substances.

(2) Self-contained breathing apparatus shall have a minimum service life rating of 30 minutes in accordance with the methods and requirements of the mine safety and health administration (MSHA) or the national institute for occupational safety and health (NIOSH).

(3) All compressed air cylinders used with self-contained breathing apparatus shall meet department of transportation (DOT) or the national institute for occupational safety and health (NIOSH) criteria.

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(4) Self-contained breathing apparatus shall be provided with an indicator which automatically sounds an audible alarm when the remaining service life of the apparatus is reduced to within a range of 20% to 25% of its rated service time.

(5) An employer shall assure that self-contained breathing apparatus for use by fire service personnel is of the positive-pressure type. All breathing apparatus that is purchased after the effective date of these amendatory rules shall be in compliance with the national fire protection association standard NFPA 1981-87, open circuit self-contained breathing apparatus, which is adopted by reference in this rule and which is available from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, or from the Michigan Department of Consumer and Industry Services, Safety Standards Division, 7150 Harris Drive, Box 30015, Lansing, Michigan 48909, at a cost as of the time of adoption of these amendatory rules of \$14.50.

(6) Subrule (5) of this rule does not prohibit the use of a self-contained breathing apparatus where the apparatus can be switched from a demand mode to a positive-pressure mode. However, such apparatus shall be in the positive-pressure mode when fire service personnel are performing emergency operations.

History: 1954 ACS 93, Eff. Nov. 19, 1977; 1979 AC; 1988 MR 1, Eff. Jan. 27, 1988; 1993 MR 7, Eff. Aug. 18, 1993.

TOOLS

R 408.17442

Source: 1993 AACS.

OPERATIONS

R 408.17451

Source: 1993 AACS.

R 408.17452

Source: 1988 AACS.

INSPECTIONS

R 408.17461

Source: 1993 AACS.

R 408.17462

Source: 1997 AACS.

R 408.17464

Source: 1993 AACS.

PART 75. FLAMMABLE AND COMBUSTIBLE LIQUIDS

R 408.17501

Source: 1982 AACS.

PART 76. SPRAY FINISHING AND DIP TANKS

R 408.17601

Source: 1989 AACS.

R 408.17602

Source: 1989 AACS.

R 408.17603

Source: 1989 AACS.

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R 408.17605
Source: 1989 AACS.

R 408.17607
Source: 1989 AACS.

R 408.17609
Source: 1989 AACS.

R 408.17610
Source: 1993 AACS.

R 408.17612
Source: 1993 AACS.

R 408.17613
Source: 1989 AACS.

R 408.17614
Source: 1989 AACS.

R 408.17615
Source: 1993 AACS.

R 408.17616
Source: 1989 AACS.

R 408.17618
Source: 1989 AACS.

DIP TANKS

R 408.17620
Source: 1989 AACS.

R 408.17621
Source: 1989 AACS.

R 408.17622
Source: 1989 AACS.

R 408.17623
Source: 1989 AACS.

R 408.17624
Source: 1989 AACS.

R 408.17630
Source: 1989 AACS.

R 408.17631
Source: 1989 AACS.

R 408.17632
Source: 1989 AACS.

R 408.17633
Source: 1989 AACS.

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FIRE PROTECTION

R 408.17636
Source: 1989 AACS.

R 408.17637
Source: 1989 AACS.

FLAMMABLE AND COMBUSTIBLE LIQUIDS

R 408.17640
Source: 1989 AACS.

R 408.17641
Source: 1989 AACS.

ELECTRICAL AND OTHER SOURCES OF IGNITION

R 408.17650
Source: 1989 AACS.

R 408.17651
Source: 1989 AACS.

R 408.17696
Source: 1989 AACS.

R 408.17699
Source: 1989 AACS.

PART 77. GRAIN HANDLING FACILITIES

R 408.17701
Source: 1997 AACS.

R 408.17702
Source: 1988 AACS.

R 408.17703
Source: 1997 AACS.

R 408.17704
Source: 1988 AACS.

R 408.17705
Source: 1997 AACS.

R 408.17706
Source: 1988 AACS.

R 408.17707
Source: 1997 AACS.

R 408.17708
Source: 1988 AACS.

R 408.17709
Source: 1988 AACS.

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R 408.17710

Source: 1988 AACS.

R 408.17711

Source: 1988 AACS.

R 408.17712

Source: 1988 AACS.

R 408.17713

Source: 1988 AACS.

R 408.17714

Source: 1988 AACS.

R 408.17715

Source: 1988 AACS.

R 408.17716

Source: 1997 AACS.

R 408.17717

Source: 1988 AACS.

R 408.17719

Source: 1997 AACS.

PART 78. ANHYDROUS AMMONIA

R 408.17801 Adoption of standard by reference.

Rule 7801. The provisions of 29 C.F.R. §1910.111 are adopted by reference in this rule, as published in the Federal Register on June 27, 1974, p. 23502, and as amended in the Federal Register on October 24, 1978, p. 49748; February 10, 1984, p. 5322; April 12, 1988, p. 12122; March 7, 1996, p. 9227; January 8, 1998, p. 1152; and June 18, 1998, p. 33450. The adopted provisions are available from the United States Governmental Printing Office, Washington DC, 20402-9325, phone: 202-783-3238 or web-site: www.osha.gov at no cost as of the time of adoption of this rule, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909, phone: 517-322-1845 or web-site: www.cis.state.mi.us/bsr/divisions/std at no cost as of the time of adoption of this rule.

History: 1979 ACS 10, Eff. May 18, 1982; 2000 MR 9 Eff. Jul 6, 2000.

PART 79. DIVING OPERATIONS

R 408.17903

Source: 1993 AACS.

R 408.17904

Source: 1993 AACS.

R 408.17905

Source: 1993 AACS.

R 408.17906

Source: 1993 AACS.

R 408.17907

Source: 1993 AACS.

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R 408.17909
Source: 1993 AACs.

R 408.17911
Source: 1993 AACs.

R 408.17912
Source: 1993 AACs.

R 408.17913
Source: 1993 AACs.

R 408.17914
Source: 1993 AACs.

R 408.17921
Source: 1993 AACs.

R 408.17922
Source: 1993 AACs.

R 408.17923
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R 408.17924
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R 408.17925
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R 408.17926
Source: 1993 AACs.

R 408.17927
Source: 1993 AACs.

R 408.17931
Source: 1993 AACs.

R 408.17932
Source: 1993 AACs.

R 408.17933
Source: 1993 AACs.

R 408.17934
Source: 1993 AACs.

R 408.17941
Source: 1993 AACs.

R 408.17942
Source: 1993 AACs.

R 408.17945
Source: 1993 AACs.

R 408.17946
Source: 1993 AACs.

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R 408.17951
Source: 1993 AACS.

R 408.17952
Source: 1993 AACS.

R 408.17953
Source: 1993 AACS.

R 408.17954
Source: 1993 AACS.

R 408.17955
Source: 1993 AACS.

R 408.17956
Source: 1993 AACS.

R 408.17957
Source: 1993 AACS.

R 408.17958
Source: 1993 AACS.

R 408.17961
Source: 1993 AACS.

R 408.17962
Source: 1993 AACS.

PART 81. BAKING OPERATIONS

R 408.18111
Source: 1982 AACS.

R 408.18114
Source: 1982 AACS.

R 408.18116
Source: 1982 AACS.

R 408.18117
Source: 1982 AACS.

R 408.18121
Source: 1982 AACS.

R 408.18122
Source: 1982 AACS.

R 408.18123
Source: 1982 AACS.

R 408.18124
Source: 1982 AACS.

R 408.18126
Source: 1982 AACS.

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R 408.18127
Source: 1982 AACS.

R 408.18130
Source: 1982 AACS.

R 408.18134
Source: 1982 AACS.

R 408.18142
Source: 1982 AACS.

R 408.18143
Source: 1982 AACS.

R 408.18144
Source: 1982 AACS.

R 408.18145
Source: 1982 AACS.

R 408.18146
Source: 1982 AACS.

R 408.18153
Source: 1982 AACS.

R 408.18158
Source: 1982 AACS.

R 408.18171
Source: 1982 AACS.

R 408.18181
Source: 1982 AACS.

PART 85. THE CONTROL OF HAZARDOUS ENERGY SOURCES

R 408.18501
Source: 1993 AACS.

R 408.18502
Source: 1993 AACS.

R 408.18599
Source: 1993 AACS.

PART 86. ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION

R 408.18601
Source: 1995 AACS.

R 408.18602
Source: 1997 AACS.

PART 90. CONFINED SPACE ENTRY

R 408.19001

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Source: 1993 AACs.

R 408.19002 Adoption by reference of federal standard.

Rule 9002. The provisions of 29 C.F.R. §1910.146 entitled "Permit Required Confined Spaces" and the amendments in the Federal Register dated June 29, 1993, and December 1, 1998, pp. 66038 to 66040 are adopted in these rules by reference, with the limitations set forth in R 408.19001(2). The adopted regulations are available from the United States Department of Labor, 801 South Waverly, Room 306, Lansing, Michigan 48917, at no charge as of the time of adoption of these rules, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909, at no charge as of the time of adoption of these rules.

History: 1993 MR 10, Eff. Nov. 2, 1993; 1999 MR 10, Eff. Nov. 8, 1999.

PART 91. PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS

R 408.19101 Scope.

Rule 9101. (1) This part applies to the manufacturing, keeping, having, storing, selling, transporting, and using of explosives, blasting agents, and pyrotechnics. These rules do not apply to the sale and use (public display) of pyrotechnics, commonly known as fireworks, or to the use of explosives in the form prescribed in the official United States pharmacopeia.

(2) The manufacture of explosives, as defined in the provisions of 29 C.F.R. §1910.109(a)(3), explosives, shall also be in compliance with the requirements contained in the provisions of 29 C.F.R. §1910.119.

(3) The manufacture of pyrotechnics as defined in the provisions of 29 C.F.R. §1910.109(a)(10) shall also be in compliance with the provisions of these rules.

History: 1993 MR 7, Eff. July 24, 1993; 1999 MR 8, Eff. Aug. 19, 1999.

R 408.19102 Adoption of standards by reference.

Rule 9102. The federal occupational safety and health administration's regulations on process safety management of highly hazardous chemicals that have been promulgated by the United States department of labor and have been codified at 29 C.F.R. §1910.119, including appendix A, with an effective date of May 26, 1992, and which were amended March 7, 1996, appearing in the Federal Register on pp. 9238, are adopted by reference in these rules as of the effective date of these rules. The definitions referred to in R 408.19101(2) and (3) and codified at 29 C.F.R. §1910.109(a)(3) and (10) are adopted in these rules by reference. The adopted regulations may be obtained from the Michigan Department of Consumer and Industry Services, Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at no charge as of the time of adoption of these rules, or from the United States Department of Labor, Occupational Safety and Health Administration, 801 S. Waverly Rd., Room 306, Lansing, MI 48917, at no charge as of the time of adoption of these rules.

History: 1993 MR 7, Eff. July 24, 1993; 1999 MR 8, Eff. Aug. 19, 1999.

PART 92. HAZARD COMMUNICATION

R 408.19201

Source: 1995 AACs.

R 408.19202

Source: 1995 AACs.

R 408.19203

Source: 1995 AACs.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF SAFETY AND REGULATION

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GENERAL INDUSTRY SAFETY STANDARDS COMMISSION

COMPLIANCE AND APPEALS

R 408.19901 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19902 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19903 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19904 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19905 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19906 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19907 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19908 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19909 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

R 408.19910 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS61, Eff. Feb. 16, 1970; rescinded 1998 MR 8, Eff. Sept. 9, 1998.

DEPARTMENT ORGANIZATION AND GENERAL FUNCTIONS

PART 1. DIRECTOR'S OFFICE

R 408.20001—R 408.20006

Source: 1997 AACs.

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PART 2. BUREAU OF ADMINISTRATIVE SERVICES

R 408.20011—R 408.20015

Source: 1997 AACS.

PART 3. BUREAU OF SAFETY AND REGULATION

R 408.20021—R 408.20031

Source: 1997 AACS.

PART 4. EMPLOYMENT RELATIONS COMMISSION

R 408.20041—R 408.20043

Source: 1997 AACS.

PART 5. WORKMEN'S COMPENSATION AGENCIES

BUREAU OF WORKMEN'S COMPENSATION

R 408.20051—R 408.20057

Source: 1997 AACS.

PART 6. EMPLOYMENT SECURITY AGENCIES

R 408.20061—R 408.20065

Source: 1997 AACS.

PART 7. OTHER BOARDS AND COMMISSIONS

R 408.20071—R 408.20086

Source: 1997 AACS.

OCCUPATIONAL SAFETY AND HEALTH

**PART 11. RECORDING AND REPORTING OF OCCUPATIONAL
INJURIES AND ILLNESSES**

R 408.22102 Intent.

Rule 1102. (1) These rules are substantially identical to the federal occupational safety and health act (OSHA) recordkeeping and reporting requirements, as contained in 29 Code of Federal Regulations, Part 1904 (1977), to assure that employers maintaining records pursuant to these rules are in compliance with the federal requirements and need not maintain additional records or submit additional reports pursuant to the federal regulations. R 408.21119 of this part pertains to the use of OSHA forms.

(2) This part shall not supersede the recordkeeping and reporting requirements as prescribed by sections 18 and 24 of the Public Law 91-596, 29 U.S.C. sections 667 and 673.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC.

R 408.22103 Applicability; exceptions; compilations and processing of petitions.

Rule 1103. (1) An employer who had not more than 10 employees at any one time during the calendar year immediately preceding the current calendar year need not comply with the requirements of this part, except for R 408.22117, concerning fatalities or multiple hospitalization accidents or exposures.

(2) Subrule (1) of this rule does not apply when an employer has been notified in writing by the department that he or she has been selected to participate in a statistical survey of recordable occupational injuries and illnesses. If selected, an employer shall maintain a log and summary of recordable occupational injuries and illnesses, form MIOSHA 200, pursuant to R 408.22111 and shall make reports pursuant to R 408.22142 for

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the period of time which is specified in the notice.

(3) The department of consumer and industry services shall supply copies of the forms provided for in these rules and shall compile, correct, and analyze data obtained pursuant to these rules. The department shall process petitions for exceptions to these rules from public employers. The bureau of labor statistics of the U.S. department of labor shall process petitions for exceptions from private employers to ensure uniformity between federal and state rules.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 1979 ACS 16, Eff. Dec. 2, 1983; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22104 Definitions; A to D.

Rule 1104. (1) "Act" means Act No. 154 of the Public Acts of 1974, as amended, being §408.1101 et seq. of the Michigan Compiled Laws.

(2) "Affected employee" means an employee who would be affected by the granting or denial of an exception, or an authorized representative as defined by the act.

(3) "Department" means the department of consumer and industry services.

(4) "Director" means the director of the department of consumer and industry services.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22105

Source: 1986 AACS.

R 408.22106

Source: 1983 AACS.

R 408.22108

Source: 1986 AACS.

R 408.22114

Source: 1983 AACS.

R 408.22116 Access to records.

Rule 1116. (1) Records provided for in R 408.22111, R 408.22113, and R 408.22114 shall be available for inspection and copying by representatives of the department of consumer and industry services.

(2) The log and summary of all recordable occupational injuries and illnesses, MIOSHA No. 200, provided for in R 408.22111 shall, upon request, be made available by the employer to any present and former employees and their representatives for examination and copying in a reasonable manner and at reasonable times. Present and former employees and their representatives shall have access to the log for any establishment in which an employee is or has been employed.

(3) Nothing in this part shall be deemed to preclude an employee and an employee representative from collective bargaining to obtain access to information relating to occupational injuries and illnesses in addition to the information made available under this part.

(4) Access to the log and summary provided under this rule shall pertain to all logs retained for the 5 years following the end of the year to which they relate as required by R 408.22115.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 1979 ACS 16, Eff. Dec. 2, 1983; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22117 Reporting of fatality or multiple hospitalization accident; contents; additional reports.

Rule 1117. (1) Within 8 hours after the occurrence of an employment accident or illness which is fatal to 1 or more employees or the hospitalization of 3 or more employees suffering injury from the same accident or illness from exposure to the same health hazard associated with their employment, the employer shall report the incident, either orally or in writing, to the Department of Consumer and Industry Services, Bureau of Safety and Regulation, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909, phone 1-800-858-0397. The report may be made by telephone or telegraph. The report

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shall include all of the following information:

- (a) The name and address of employer.
- (b) Date and time of accident.
- (c) Address of accident.
- (d) Name of employee affected.
- (e) Nature of work.
- (f) Nature of injuries.

(g) A description of the occurrence.

(2) The director may require additional reports, in writing or otherwise, as deemed necessary, concerning the accident or exposure.

(3) For the purpose of this rule, hospitalization shall not include those services provided for in the definition of first aid.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 1979 ACS 16, Eff. Dec. 2, 1983; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22120 Change of ownership.

Rule 1120. When an establishment has changed ownership, the employer shall be responsible for maintaining records and filing reports only for that period of the year during which he or she owned the establishment. The employer shall preserve those records of the prior ownership which are required to be kept under this part. These records shall be retained at each establishment to which they relate, for the period, or remainder of the period, required in rule 1115.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22122 Employer having not more than 10 employees; exceptions; obligations.

Rule 1122. An employer who had not more than 10 employees at any time during the calendar year immediately preceding the current calendar year need not comply with any of the requirements of this part, except that the employer shall comply with both of the following requirements:

(a) The obligation to report under R 408.22117 concerning fatalities or multiple hospitalization accidents.

(b) The obligation to maintain a log and summary of occupational injuries and illnesses under R 408.22111 and to make reports under R 408.22142 upon being notified, in writing, by the Michigan department of consumer and industry services, that the employer has been selected to participate in a statistical survey of occupation injuries and illnesses.

History: 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 1979 ACS 16, Eff. Dec. 2, 1983; 1986 MR 12, Eff. Jan. 3, 1987; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22131 Employer petition for alternate record maintenance.

Rule 1131. A public employer who wishes to maintain records in a manner different from that required by this part shall submit a petition containing the information prescribed in R 408.21133 to the Department of Consumer and Industry Services, Bureau of Safety and Regulation, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22136 Notice of exception; publication.

Rule 1136. Notice that an exception has been granted as prescribed by this part shall be published in the MIOSHA News, a quarterly publication of the department of consumer and industry services. This notice may summarize the alternative to the rules involved which the particular exception permits.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22141 Description of statistical program.

Rule 1141. (1) The department of consumer and industry services shall develop and maintain a program of collection, compilation, and analysis of occupational safety and health statistics. The program shall

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consist of periodic surveys of occupational injuries and illnesses. An employer covered by the act may be chosen to participate in the surveys.

(2) The sample design encompasses probability procedures, detailed stratification by industry and size, and a systematic selection within strata. Some industries shall be sampled more heavily than others depending on the injury rate level based on previous experience. The survey shall produce adequate estimates for most 4-digit standard industrial classification (SIC) industries in manufacturing and for 3-digit SIC classification in nonmanufacturing.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

DEPARTMENT OF CONSUMER & INDUSTRY SERVICES

DIRECTOR'S OFFICE

MIOSHA SAFETY AND HEALTH STANDARDS

PART 12. VARIANCES

R 408.22203 Definitions; A to E.

Rule 1203. (1) "Act" means Act No. 154 of the Public Acts of 1974, as amended, being §408.1001 et seq. of the Michigan Compiled Laws.

(2) "Administrative procedures act" means Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the Michigan Compiled Laws.

(3) "Affected employee" means an employee who would be affected by the issuance or denial of a variance or any of the employee's authorized representatives, such as the employee's collective bargaining agent.

(4) "Department" means the department of consumer and industry services.

(5) "Director" means the director of the department of consumer and industry services.

(6) "Experimental variance" means a written order issued by a department authorizing an employer to deviate from the requirements of an occupational safety or health standard while conducting or participating in an experiment to demonstrate or validate techniques to safeguard the health or safety of workers.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22213 Notice of granted variance; publication.

Rule 1213. Notice that a variance has been granted under this part shall be published in the MIOSHA News, a quarterly publication of the department of consumer and industry services.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22221 General application requirements.

Rule 1221. (1) An employer desiring a temporary or permanent variance from a standard, or a portion of a standard, shall file a written application containing the information prescribed in this rule and R 408.22222 or R 408.22223 with the appropriate division of the Department of Consumer and Industry Services, Bureau of Safety and Regulation, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(2) An application for a variance shall include all of the following information:

(a) The name and address of the firm, and the name and title of the person filing the application.

(b) The address of the place of employment involved.

(c) A specification of the standard, or portion of the standard, from which the application seeks a variance.

(d) A request for a hearing, as provided in these rules.

(e) A statement that the applicant has informed affected employees of the application, at the time the application for a variance was filed, by giving a copy of the application to the affected employees' authorized representative, if any, and by posting a copy of the application or a statement containing a summary of the application. A summary of the application shall specify where a copy of the application may be examined.

Posting shall be at the area in which the affected employees work.

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(f) A description of how affected employees have been informed of the variance application, and of their right to petition the director for a hearing.

(3) The department may issue an interim order subject to the following conditions:

(a) An application for an interim order may be made to be effective until a decision is rendered on the application for the variance. An application for an interim order shall include a statement of facts and reasons as to why the applicant believes that the requested order should be granted. The department may rule ex parte upon the application for an interim order.

(b) The department may grant an interim order on its own motion.

(c) If an application for an interim order filed pursuant to subdivision (a) of this subrule is denied, then the applicant shall be given prompt written notice of the denial. This notice shall include a statement of the grounds for denial.

(d) If an interim order is granted, then the department shall serve a copy of the order upon the applicant and other parties. The terms of the interim order may specify necessary or appropriate conditions. The order shall provide that the applicant shall give notice of the granting of the order and its terms to affected employees by the same means used to inform them of an application for a variance.

(4) Where the application for a variance concerns a state standard or a portion of a state standard, identical in requirements and substance to a federal standard, the applicant shall do all of the following:

(a) Identify the identical federal standard.

(b) Certify whether the applicant has filed for a variance, on the same facts, with the assistant secretary for occupational safety and health, U.S. department of labor.

(c) Certify whether citations for violations of the identical federal standard, or portion of the federal standard, have been issued to the applicant by the federal government. If a citation has been issued, then identification shall be included.

(5) Variances granted by the U.S. department of labor to multistate employers pursuant to 29 CFR 1905.13(c) (1975) shall be deemed as an authoritative interpretation of the employers' compliance obligation with the state standard.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22224 Application for modification, revocation, and renewal of variance; contents; informing affected employees; furnishing copy of application to employer; notice of intent to revoke or modify a variance; publication of notice.

Rule 1224. (1) An employer or an affected employee may apply in writing to the department for a modification, revocation, or renewal of a variance issued under section 27 of the act. The application shall contain all of the following information:

(a) The name and address of the firm, and the name and title of the applicant.

(b) A description of the relief, whether modification, revocation, or renewal, which is sought.

(c) A statement setting forth with particularity the grounds for the modification, revocation, or renewal.

(d) Any request for a hearing as provided in these rules.

(2) If the applicant is the employer, a certification shall be made that the applicant has informed his affected employees of the application by doing both of the following:

(a) Giving a copy of the application to the affected employees' authorized representative.

(b) Posting a copy of the application or a statement containing a summary of the application. If a summary of the application is posted, it shall specify where a copy of the full application may be examined. Posting shall be at the area in which the affected employees work.

(3) If the applicant is an affected employee, then the department shall make a certification that a copy of the application has been furnished to the employer.

(4) A department may, on its own motion, proceed to modify or revoke a variance. In that event, the department shall give actual notice of its intention to revoke or modify to the employer and affected employees. The notice shall inform the employer and affected employees of their right to request a hearing. A request for a hearing shall include a short and plain statement of the following:

(a) How the proposed modification or revocation will affect the requesting party.

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(b) What the requesting party seeks to show on the subjects or issues involved.

(5) A notice of the department's own intention to modify or revoke a variance shall be published in the MIOSHA News in the same manner as required by R 408.22227.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22227 Application for variance; interim order; publication of summary; opportunity for public response; informal hearing; notice; issuance of denial or variance.

Rule 1227. (1) Upon receipt of a valid application for a variance, and if the application has not been denied pursuant to this part, the department may issue an interim order and shall publish in the MIOSHA News a summary of the application. The published notice shall include a statement outlining the opportunity for public response and an informal hearing. This informal hearing is separate from the formal hearing that is provided for in R 408.22226 and R 408.22231 to R 408.22251 of this part.

(2) Upon request for an informal hearing resulting from the published application for a variance, the department shall notify the person requesting the hearing, the employer applying for the variance, the employer's employees, or the authorized employee representative, of all of the following:

(a) The time, date, place, and the subject matter of the hearing.

(b) The authority under which the hearing is to be held.

(3) The department shall consider the views expressed by the participants at the informal hearing, if held, and shall issue a denial of the application or shall issue the variance.

History: 1954 ACS 99, Eff. May 23, 1979; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22234 Pre-hearing conference.

Rule 1234. (1) Upon his or her own motion or the motion of a party, the hearing officer may request the parties or the parties' counsel to meet with the hearing officer for a conference to consider all of the following:

(a) Simplification of the issues.

(b) Necessity or desirability of amendments to documents for purposes of clarification, simplification, or limitation.

(c) Stipulations, admissions of fact, and contents and authenticity of documents.

(d) Limitation of the number of parties and of expert witnesses.

(e) Other matters as may tend to expedite the disposition of the proceeding, and to assure a just conclusion to the proceeding.

(2) The hearing officer shall state on the record the stipulations, agreements, and other matters agreed to by the parties at the conference.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

R 408.22240 Decision of director.

Rule 1240. (1) Upon receipt of the record transmitted under these rules, the director shall, within a reasonable time, render his or her decision.

(2) The decision may affirm, modify, or set aside, in whole or in part, the findings, conclusions, and the rule or order contained in the proposed decision of the hearing officer, and shall include a statement of reasons which shall provide for each conclusion of law, supporting authority, or reasoned opinion.

(3) The director shall serve or cause to be served, a copy of his or her decision upon all parties and the hearing officer.

History: 1954 ACS 86, Eff. Mar. 12, 1976; 1979 AC; 2000 MR 8, Eff. Jun. 22, 2000.

HEARINGS OFFICE
POLITICAL ACTIVITY HEARINGS

R 408.22901

Source: 1981 AACS.

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R 408.22902
Source: 1981 AACS.

WAGE AND FRINGE BENEFIT HEARINGS

R 408.22951
Source: 1982 AACS.

R 408.22952
Source: 1982 AACS.

R 408.22953
Source: 1982 AACS.

R 408.22954
Source: 1982 AACS.

R 408.22955
Source: 1982 AACS.

R 408.22956
Source: 1982 AACS.

R 408.22957
Source: 1982 AACS.

R 408.22958
Source: 1982 AACS.

R 408.22959
Source: 1982 AACS.

R 408.22960
Source: 1982 AACS.

R 408.22961
Source: 1982 AACS.

R 408.22962
Source: 1982 AACS.

R 408.22963
Source: 1982 AACS.

R 408.22964
Source: 1982 AACS.

R 408.22965
Source: 1982 AACS.

R 408.22966
Source: 1982 AACS.

R 408.22967
Source: 1982 AACS.

R 408.22968
Source: 1982 AACS.

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R 408.22969

Source: 1982 AACS.

R 408.22970

Source: 1982 AACS.

R 408.22971

Source: 1982 AACS.

DIRECTOR'S OFFICE

BUILDING OFFICIALS, PLAN REVIEWERS, AND INSPECTORS

R 408.30001

Source: 1991 AACS.

R 408.30004

Source: 1991 AACS.

R 408.30007

Source: 1991 AACS.

R 408.30010

Source: 1991 AACS.

R 408.30013

Source: 1991 AACS.

R 408.30016

Source: 1991 AACS.

R 408.30019

Source: 1991 AACS.

R 408.30022

Source: 1991 AACS.

R 408.30025

Source: 1991 AACS.

R 408.30028

Source: 1991 AACS.

R 408.30031

Source: 1991 AACS.

R 408.30034

Source: 1991 AACS.

R 408.30037 Building inspector; experience.

Rule 37. (1) An applicant for registration as a provisional building inspector shall be qualified as specified in either of the following provisions:

(a) Have not less than 4 years of experience obtained over a period of 12 years immediately preceding the date of the application for provisional registration in 1 or more of the following categories:

(i) A licensed residential builder under the provisions of Act No. 299 of the Public Acts of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws, who has been actively engaged in the construction business for not less than 4 years.

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(ii) A contractor who has been actively engaged in the construction business for not less than 4 years. This category does not include a person who is licensed as a contractor under Act No. 217 of the Public Acts of 1956, as amended, Act No. 266 of the Public Acts of 1929, as amended, or Act No. 192 of the Public Acts of 1984, as amended, being §338.881 et seq., §338.901 et seq., or §338.971 et seq. of the Michigan Compiled Laws, respectively.

(iii) Two years of experience as a skilled worker within the 4 years required in this subdivision in 1 of the following disciplines:

- (a) Structural carpentry.
- (b) Structural masonry.
- (c) Structural steel erection.
- (d) Structural concrete construction.

(b) Possess a license as an architect or engineer under the provisions of Act No. 299 of the Public Acts of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws.

(2) A person who has completed a recognized curriculum at an institution of higher education in a construction-related field shall be deemed to have met the experience requirement for not more than 2 of the 4 years of experience required in subrule (1)(a) of this rule for registration as a provisional building inspector.

(3) An applicant who meets the requirements of this rule shall be deemed qualified for registration as a building inspector, subject to the provisions of section 12(2) of the act.

(4) An applicant shall submit, with an application, documentation of his or her experience. The documentation may consist of any of the following:

- (a) An affidavit.
- (b) Notarized letters.
- (c) Copies of licenses.
- (d) A job description from a present or former employer.
- (e) A permit history from authorized enforcing agencies.
- (f) Other information.

History: 1991 MR 6, Eff. June 28, 1991; 1998 MR 10, Eff. Nov. 2, 1998.

R 408.30040

Source: 1991 AACS.

R 408.30043 Mechanical inspector; experience.

Rule 43. An applicant for registration as a provisional mechanical inspector shall have 4 years of experience in either the work classification of heating ventilation and air conditioning (HVAC) or hydronic heating and process piping or a combination of experience in both classifications defined in 1984 PA 192, MCL 338.971 et seq. and known as the Forbes mechanical contractors act. Two of the 4 years of experience shall have been at the journey level or at a higher level.

History: 1991 MR 6, Eff. June 28, 1991; 2000 MR 21, Eff. Dec. 27, 2000.

R 408.30046

Source: 1991 AACS.

R 408.30049

Source: 1991 AACS.

R 408.30052

Source: 1991 AACS.

R 408.30055

Source: 1991 AACS.

CONSTRUCTION CODE

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PART 1. ADMINISTRATION AND ENFORCEMENT

R 408.30111

Source: 1981 AACS.

R 408.30114

Source: 1981 AACS.

PART 3. APPEAL BOARDS AND HEARINGS

R 408.30316

Source: 1987 AACS.

PART 4. BUILDING CODE

R 408.30401 Applicable code.

Rule 401. The provisions of the BOCA national building code, 1996 edition, except for sections 104.6, 105.6, 112.3, 112.3.1, 121.2 to 121.2.5, 121.3 to 121.7, the definitions of “building” and “structure” in section 202.0, 418.3.2.2 to 418.3.2.10.5, 418.3.3.1 to 418.3.3.5.2, 421.9 to 421.9.3, 1107.4.4, 1110.2.2, figures 1608.3(1) to 1608.3(3) in section 1608.0, sections 2701.2 to 2708.3, 2802.0 to 2804.4, 2806.0 to 2806.4, 2808.0 to

2809.1, 2902.0 to 2906.1, 2908.0 to 2908.3.3, 3001.2 to 3007.2, 3007.7 to 3009.1, 3011.1 to 3013.1, 3109.0 to 3109.3.2, 3305.0 to 3305.3.4, 3312.2, reference standard number NFIPA 70-96, BNPMC-96, BNFPC-96, IMC-96, IPC-95, IPSCC-95, and chapters 11 through 46 of CABO “One & Two Family Dwelling Code-95” listed in chapter 35 govern the construction, alteration, relocation, demolition, use, and occupancy of buildings and structures, and, with exceptions noted, the BOCA national building code is adopted by reference in these rules. The code is available for inspection at the Lansing office of the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes. The code may be purchased from the Building Officials and Code Administrators International, Incorporated, 4051 West Flossmoor Road, Country Club Hills, Illinois 60477, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864 at a cost as of the time of adoption of these amendatory rules of \$42.00 each.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30402 Title.

Rule 402. Section 101.1 of the code is amended to read as follows:

101.1. These rules shall be known as the Michigan building code, hereinafter referred to as “the code.”

History: 1979 ACS 8, Eff. Dec. 16, 1981; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

408.30403 Rescinded.

History: 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1988 MR 12, Eff. Jan. 4, 1989; 1995 MR 5, Eff. May 18, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30403a

Source: 1997 AACS.

R 408.30404

Source: 1995 AACS.

R 408.30405 Professional architectural and engineering services.

Rule 405. Section 114.1 of the code is amended to read as follows:

114.1. The construction documents for new construction, alteration, repair, expansion, addition, or

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modification for buildings or structures shall be prepared by or under the direct supervision of an architect or professional engineer licensed under Act No. 299 of the Public Acts of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws, and known as the occupational code. The construction documents shall include the name and address of the architect or professional engineer and shall bear that architect's or professional engineer's original signature, seal, and date.

Exceptions are as follows:

(a) Alterations determined by the building official to be of a minor nature.

(b) This section shall not apply to work completed by a governmental subdivision or state agency costing less than \$15,000.00 or to a building of use group R-3 or R-4 containing not more than 3,500 square feet of calculated floor area.

History: 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30406

Source: 1995 AACS.

R 408.30407 Rescinded.

History: 1979 ACS 8, Eff. Dec. 16, 1981; 1995 MR 5, Eff. May 18, 1995; rescinded, 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30408

Source: 1995 AACS.

R 408.30409

Source: 1995 AACS.

R 408.30410

Source: 1995 AACS.

R 408.30411

Source: 1995 AACS.

R 408.30412

Source: 1995 AACS.

R 408.30413

Source: 1997 AACS.

R 408.30414

Source: 1997 AACS.

R 408.30415

Source: 1997 AACS.

R 408.30415a

Source: 1995 AACS.

R 408.30416—R 408.30423

Source: 1997 AACS.

R 408.30427 Barrier free design for buildings, structures, and improved areas.

Rule 427. Sections 1103.1, 1104.2, 1107.4.1 1110.2, 1110.2.1, 1110.3, and 1110.4 of the code are amended and sections 1103.3, 1103.4, 1104.1.1, 1104.4, 1105.1.1, and table 1107.4.1, sections 1107.2.3.1 and 1108.2.2 are added to the code to read as follows:

1103.1. Where required under Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws, the provisions of this rule shall apply to and throughout all buildings,

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structures, and improved areas used by the general public, employees, and persons visiting or on the premises for any reason.

Exceptions:

(a) Elevator pits, elevator penthouses, mechanical rooms, piping, or equipment catwalks.

(b) Buildings of use group R-3, R-4, or U.

(c) Vertical access is not required to the following areas of all buildings:

(i) Storage areas.

(ii) Enclosed or unenclosed window display areas which have a depth of not more than 6 feet, which are accessed exclusively by employees for arranging and displaying merchandise and promotional material, and which are restricted so that customers cannot enter.

(iii) Areas that are used solely for the purpose of servicing or inspecting motor vehicles from underneath.

(d) Vertical access is not required to the following areas of buildings that have less than 3 stories or buildings that are 3 or more stories when the area of each floor is less than 3,000 square feet:

(i) Nonadministrative and nonpublic areas of water and wastewater treatment facilities.

(ii) Platforms and levels that are used exclusively for the purpose of equipment operation or the inspection, repair, and maintenance of equipment.

The net area shall exclude the area of equipment and open wells. (e) For all use groups, except I-3, raised security observation areas that are 25 square feet or less.

(f) Submersion tanks that are used only for baptism. (g) Buildings, structures, or improved areas which exist on or before the effective date of these rules and which are in compliance with the previous barrier free design requirements promulgated by the construction code commission need not be in compliance with these rules, unless the alteration specifically modifies an area for which these rules are applicable. (h) Areas intended for use and occupancy by or for any of the following:

(i) Balcony seating which is less than 1/3 of the total seating and which is in use group A-4.

(ii) The operation of motion picture projection equipment.

(iii) Individuals subject to 21 C.F.R. parts 210 and 211 for clean areas. (iv) Able-bodied military, police, fire fighter, prison guard, or postal inspector personnel.

(i) Upper tiers of tiered choir area, when the lowest tier is accessible.

1103.3. Except where a dimension range is provided, for any required dimension 12 inches (305 mm) to 20 inches (508 mm), the construction tolerance shall be of an inch (13 mm) and for any required dimension of more than 20 inches (508 mm), the construction tolerance shall be 1 inch (25 mm).

Exception: The required clear opening for doors shall not be less than 32 inches (813 mm).

1103.4. Equivalent facilitation, technical infeasibility, structure impracticability, and disproportionate cost shall be determined and approved by the barrier free design board through the exception process.

1104.1.1. Exterior accessible routes shall be uninterrupted by steps or abrupt changes in level, have a width of not less than 60 inches (1,525 mm), and have a gradient of not more than 1 foot in 20 feet. Where site constraints will not permit a gradient of 1 foot in 20 feet, a ramp that is in compliance with section 1016.0 of the code shall be allowed. 1104.2. At least 1 accessible route shall connect accessible spaces, elements, facilities, and buildings that are on the same site. Where only 1 accessible route is provided, the accessible route may not pass through kitchens, storage rooms, restrooms, closets, or similar spaces. Exception: A single accessible route shall be permitted to pass through a kitchen or storage room in an accessible or adaptable dwelling unit.

1104.4. Accessible vertical interior routes that are in compliance with the requirements of section 1016.0 or section 1108.4 of the code shall be provided from all entrances to all levels, spaces, and elements of all building areas as required by section 1103.0 of the code. Exception: Levels of buildings of use groups R-1 and R-2 where accessible units and communal facilities are not provided.

1105.1.1. A vertical clearance of not less than 98 inches (2,489 mm) shall be provided to, from, and including the accessible parking spaces in parking structures.

1107.2.3.1. If direct access is provided between the seating and performance areas, then direct accessible access shall also be provided.

1107.4.1. Buildings of use group R-1 shall include fully accessible sleeping units in accordance with the provisions of the following table:

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TABLE 1107.4.1.
Minimum Number of Fully Accessible
Barrier Free Sleeping Units

Number of Units for R-1 Facilities	Accessible Units	Units with Roll-in Shower
1 to 25	1	
26 to 50	2	
51 to 75	3	1
76 to 100	4	1
101 to 150	6	2
151 to 200	9	2
201 to 300	12	3
301 to 400	18	4
401 to 500	30	4, plus 1 for each additional 100 over 400
501 and over		6% of total

1108.2. Access to plumbing fixtures.

1108.2.2. The maximum water temperature at an outlet shall be 120 degrees Fahrenheit.

1110.2. Each element or space of a building or facility that is altered shall be in compliance with these rules as required under Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws.

1110.2.1. If an alteration affects the usability of, or is accessed to, an area containing a primary function, then an accessible route to the primary function area shall be provided. The accessible route to the primary function area shall include any toilet rooms, bathrooms, or drinking fountains serving the primary function area.

Exceptions:

(a) Alterations to windows, hardware, operating controls, electrical outlets, and signage.

(b) Alterations to mechanical systems, electrical systems, installations, or fire protection systems or abatement of hazardous materials.

(c) Alterations undertaken for the primary purpose of increasing the accessibility of an existing building, facility, or element.

1110.3. Each element or space of a building or facility that undergoes a change of occupancy shall be in compliance with these rules as required under Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. Of the Michigan Compiled Laws.

1110.4. These rules apply to buildings and facilities designated as historic structures that undergo alterations or a change of occupancy.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1987 MR 3, Eff. Apr. 2, 1987; 1988 MR 7, Eff. Aug. 10, 1988; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30427a

Source: 1995 AACS.

R 408.30427b

Source: 1995 AACS.

R 408.30427c

Source: 1995 AACS.

R 408.30427d

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Source: 1995 AACS.

R 408.30427e

Source: 1995 AACS.

R 408.30428

Source: 1997 AACS.

R 408.30429

Source: 1995 AACS.

R 408.30430

Source: 1995 AACS.

R 408.30431

Source: 1997 AACS.

R 408.30432

Source: 1995 AACS.

R 408.30433 Rescinded.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1987 MR 3, Eff. Apr. 2, 1987; 1988 MR 7, Eff. Aug. 10, 1988; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30434

Source: 1997 AACS.

R 408.30437

Source: 1995 AACS.

R 408.30442

Source: 1997 AACS.

R 408.30443 Means of egress doorways.

Rule 443. Section 1017.2.3 of the code is amended and sections 1017.2.3.1, 1017.2.4, 1017.3.1, 1017.4.1.4, and 1017.4.3.1 to 1017.4.3.3 are added to the code to read as follows:

1017.2.3. The space between doors in series shall not be less than 84 inches (2134 mm) as measured when the doors are in the closed position.

Exceptions:

(a) A power-operated door in a building of use group I-1, R-3, or U.

(b) Double-acting doors shall be spaced not less than 60 inches (1,525 mm) apart when in a closed position.

(c) A door operated by a time-delay closing device.

1017.2.3.1. A vestibule shall provide a clear floor area that is a 60-inch (1,525 mm) diameter circle. The clear floor area shall not be infringed upon by the swing of the door.

1017.2.4. The minimum maneuvering clearance at doors that are not automatic or power-assisted shall be in compliance with the requirements of CABO A117.1 listed in chapter 35, section 4.13.6. The clear space shall be level.

Exceptions:

(a) An existing building or a building for which a legal building permit has been issued before the effective date of this rule.

(b) An R-1 or R-2 sleeping and dwelling unit other than an accessible unit.

1017.3.1. Double swing impact doors shall provide not less than a 32 inch clear opening using the combined leaf width.

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1017.4.1.4. Door surfaces: The bottom 10 inches of all accessible doors, except automatic doors, power assisted doors, and sliding doors, shall have a smooth, uninterrupted surface.

1017.4.3.1. At least 1 entrance to the following locations shall have power-operated doors:

(a) A mall or a building of use group A, E, I, excluding a correctional facility, M, and R-1 (hotels) that has more than 24,000 square feet in building area.

(b) A building of use group B that has more than 40,000 square feet in building area.

1017.4.3.2. A door shall take 3 or more seconds to open and shall not require more than a force of 15 pounds to stop door movement.

1017.4.3.3. If a manual-activating device is used, then the device shall be not more than 10 feet from the door.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 7, Eff. July 30, 1985; 1987 MR 3, Eff. Apr. 2, 1987; 1988 MR 7, Eff. Aug. 10, 1988; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30445 Ramps.

Rule 445. Section 1016.2.1 of the code is amended to read as follows:

1016.2.1. The minimum width of a means of egress ramp shall be not less than that required for corridors by section 1011.3 of the code. A ramp that is provided as required by section 1101.1 of the code, but not as an egress ramp, shall be not less than 60 inches (1,525 mm) wide for exterior access.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1987 MR 3, Eff. Apr. 2, 1987; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30446

Source: 1997 AACS.

R 408.30447

Source: 1995 AACS.

R 408.30448 General limitations.

Rule 448. Section 1005.5 of the code is amended to read as follows:

1005.5. Open-sided walking areas: Guards shall be located along open-sided walking surfaces, mezzanines, stairways, ramps, and landings that are located more than 15 ½ inches (394 mm) above the floor or grade below. The guards shall be constructed in accordance with section 1021.0 of the code.

Exception: Guards are not required for the following locations:

(a) On the loading side of loading docks.

(b) On the auditorium side of stages and raised platforms.

(c) On raised stage and platform floor areas such as runways, ramps, and side stages utilized for entertainment or presentations.

(d) At vertical openings in the performance area of stages and platforms.

(e) At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.

(f) Porches or exterior walking surfaces which are of use group R-3 occupancies and which are not more than 30 inches above grade.

History: 1954 ACS 79, Eff. Nov. 6, 1974; 1954 ACS 89, Eff. Nov. 13, 1976; 1954 ACS 101, Eff. Nov. 21, 1979; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1987 MR 3, Eff. Apr. 2, 1987; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30448a

Source: 1997 AACS.

R 408.30448b

Source: 1997 AACS.

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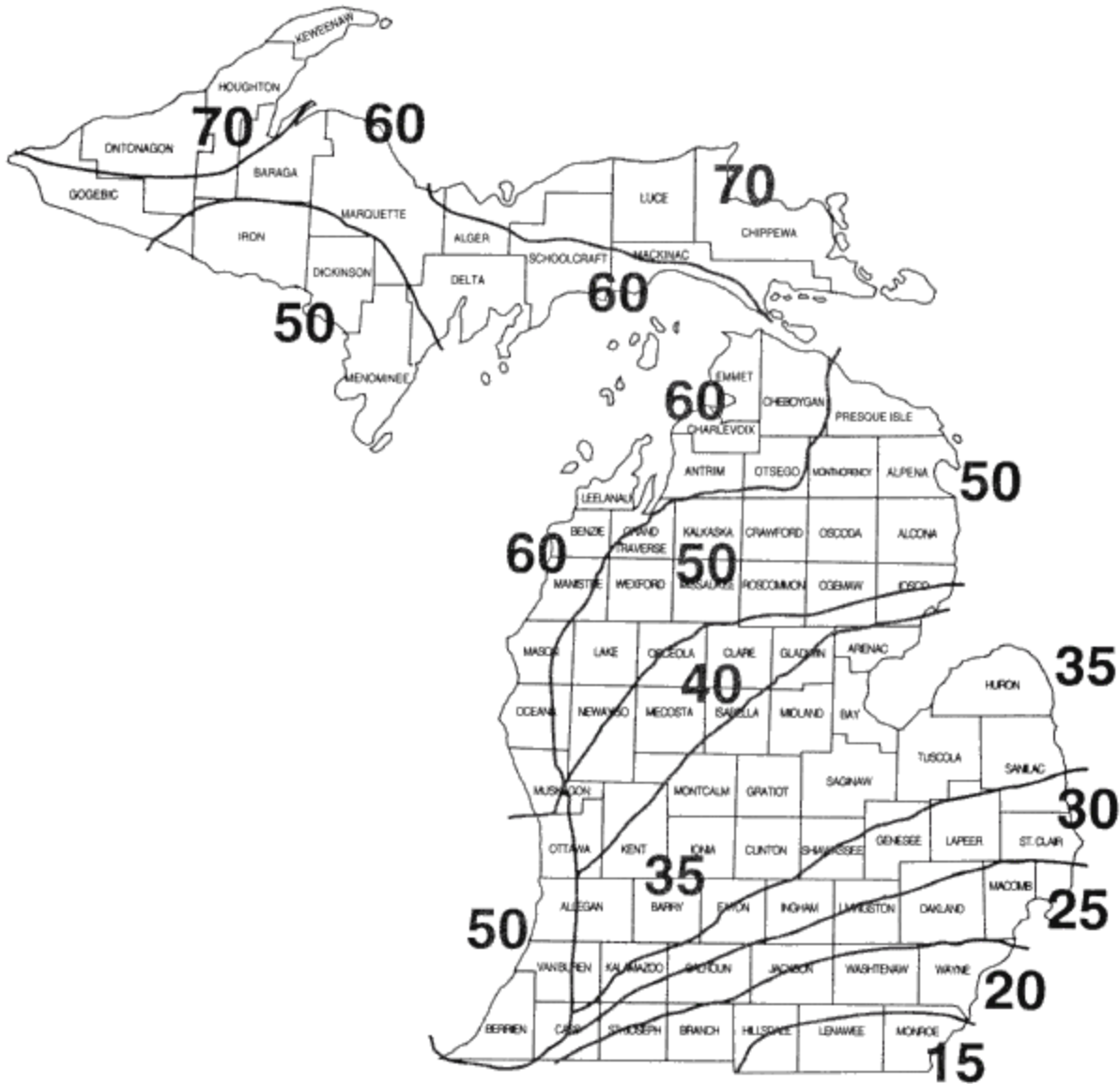
R 408.30448c

Source: 1997 AACS.

R 408.30448d Ground snow loads.

Rule 448d. Section 1608.3 of the code is amended, and figure 1608.3 is added to the code, to read as follows:

1608.3. The state ground snow loads that shall be used to determine the design snow loads for roofs are



specified in figure 1608.3.

History: 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30449

Source: 1995 AACS.

R 408.30449a

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Source: 1997 AACS.

R 408.30451e Rescinded.

History: 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 5, Eff. May 18, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30451a

Source: 1997 AACS.

R 408.30451b

Source: 1997 AACS.

R 408.30451c

Source: 1995 AACS.

R 408.30451d

Source: 1997 AACS.

R 408.30451e

Source: 1995 AACS.

R 408.30452

Source: 1997 AACS.

R 408.30453 Treads and risers.

Rule 453. Section 1014.6 of the code is amended to read as follows:

1014.6 Treads and Risers: The maximum riser height shall be 7 inches (178 mm) and the minimum riser height shall be 4 inches (102 mm). The riser height shall be measured vertically between the leading edges of the adjacent treads. The minimum tread depth shall be 11 inches (279 mm), measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads' leading edge.

Exceptions:

- (a) Winders in accordance with section 1014.6.3 of the code.
- (b) Spiral stairways in accordance with section 1014.6.4 of the code.
- (c) Circular stairways in accordance with section 1014.6.5 of the code.
- (d) Alternating tread stairways in accordance with section 1014.6.6 of the code.
- (e) Stairways serving as aisles in assembly seating areas where the stairway pitch or slope is set, for sight line reasons, by the slope of the adjacent seating area.
- (f) Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced.
- (g) Existing stairways.
- (h) In occupancies in use group R-3 and within dwelling units in occupancies in use group R-2, the maximum riser height shall be 8 ¼ inches (210 mm) and the minimum tread depth shall be 9 inches (229 mm). A 1-inch (25 mm) nosing shall be provided on stairways that have solid risers.
- (i) Stairways in penal facilities serving guard towers, observation stations, and control rooms that do not have an area of more than 250 square feet (23 m²) may have a riser that is not more than 8 inches (203 mm) high and treads that are not less than 9 inches (229 mm) deep.

History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30454 Rescinded.

History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30455 Rescinded.

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History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30456 Rescinded.

History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

Editor's note: Former R 408.30456 was rescinded by 1979 ACS 8, Eff. Dec. 16, 1981.

R 408.30457

Source: 1995 AACS.

R 408.30458

Source: 1995 AACS.

R 408.30459

Source: 1997 AACS.

R 408.30460

Source: 1997 AACS.

R 408.30461

Source: 1997 AACS.

R 408.30475 Existing structures.

Rule 475. Sections 3403.1, 3404.2, 3405.1, and 3408.2 of the code are amended to read as follows:

3403.1. Except as required by Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws, regarding barrier free design requirements, an addition to a structure shall be in compliance with the requirements of the code for new construction and may not result in an increase in hazard to the occupants. Any existing structure and additions shall be in compliance with the height and area requirements of section 503.0 of the code. Existing fire areas that are increased by the addition shall be in compliance with the provisions of chapter 9. Any alterations made to the existing structure shall be in compliance with the requirements of this chapter and chapter 1.

3404.2. Except as required by Act No. 1 of Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws, regarding barrier free design requirements, an alteration to any structure shall be in compliance with the code requirements for a new structure and may not result in an increase in hazard to the occupants. Portions of the structure not altered and not affected by the alteration are not required to be in compliance with the code requirements for a new structure. 3405.1. It is unlawful to make any change in the use or occupancy of any structure or portion of a structure that would subject it to any special provisions of the code without approval of the building official and the building official's certification. The certification shall verify that the structure is in compliance with the intent of the provisions of law governing building construction for the proposed new use and occupancy and that the change does not result in any greater hazard to the public safety or welfare. Any change in use group or occupancy load shall require compliance with the barrier free design requirements in accordance with Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws.

3408.2. (1) A structure that qualifies as an existing structure as defined in chapter 2 may be made to conform to the requirements of this section or the provisions of sections 3403.0 to 3407.0 of the code, except as required by Act No. 1 of the Public Acts of 1966, as amended, being §125.1351 et seq. of the Michigan Compiled Laws, regarding barrier free design requirements.

(2) The provisions in sections 3408.2.1 to 3408.2.5 of the code shall apply to existing occupancies that will continue to be, or are proposed to be, in use groups A, B, E, F, M, R, and S. The provisions do not apply to buildings that have occupancies in use group H or I.

History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

Editor's note: Former R 408.30475 was rescinded by 1979 ACS 8, Eff. Dec. 16, 1981.

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R 408.30476

Source: 1995 AACS.

R 408.30495

Source: 1997 AACS.

Editor's note: Former R 408.30495 was rescinded by 1954 ACS 101, Eff. Nov. 21, 1979.

R 408.30495a

Source: 1995 AACS.

R 408.30495b

Source: 1997 AACS.

R 408.30495c

Source: 1997 AACS.

R 408.30495d

Source: 1997 AACS.

R 408.30495e

Source: 1997 AACS.

R 408.30495f

Source: 1997 AACS.

R 408.30495g

Source: 1997 AACS.

R 408.30495h

Source: 1997 AACS.

R 408.30495i

Source: 1997 AACS.

R 408.30495j

Source: 1997 AACS.

R 408.30495k

Source: 1997 AACS.

R 408.30497

Source: 1997 AACS.

R 408.30499 Adoption of standards by reference; referenced codes.

Rule 499. (1) National sanitation foundation standard 50 entitled "Circulation System Components for Swimming Pools, Spas, or Hot Tubs" is adopted by reference in these rules and is available from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864 or from the National Sanitation Foundation, 3475 Plymouth Road, Ann Arbor, Michigan 48105, at a cost as of the time of adoption of these amendatory rules of \$70.00.

(2) Chapter 35 of the code is amended to add the following referenced codes, which are available from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864:

(a) Michigan Electrical Code R 408.30801 et seq. of the Michigan Administrative Code.

(b) Michigan Mechanical Code R 408.30901a et seq. of the Michigan Administrative Code.

(c) Michigan Plumbing Code R 408.30701 et seq. of the Michigan Administrative Code.

History: 1985 MR 7, Eff. July 30, 1985; 1988 MR 7, Eff. Aug. 10, 1988; 1995 MR 5, Eff. May 18, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

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R 408.30499a Treads and risers in CABO “One & Two Family Dwelling Code.”

Rule 499a. Section 314.2 of the CABO “One & Two Family Dwelling Code” is amended to read as follows:
314.2. Treads and risers. The maximum riser height shall be 8 ¼ inches (210 mm) and the minimum tread depth shall be 9 inches (229 mm). The riser height shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost project of adjacent treads and at a right angle to the treads’ leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than 1 unit vertical in 48 units horizontal (2% slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 of an inch (9.5 mm). The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 of an inch (9.5 mm).

History: 1998 MR 11, Eff. Nov. 30, 1998.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF CONSTRUCTION CODES

GENERAL RULES

PART 6. MOBILE HOME CODE

R 408.30601 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May 17, 1999.

R 408.30611 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May, 17, 1999.

R 408.30616 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May 17, 1999.

R 408.30621 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May 17, 1999.

R 408.30626 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May 17, 1999.

R 408.30631 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff. May 17, 1999.

R 408.30636 Rescinded.

History: 1954 ACS 84, Eff. June 27, 1975; 1979 AC; rescinded 1999 MR 5, Eff, May 17, 1999.

PART 7. PLUMBING CODE

R 408.30701 Applicable code.

Rule 701. Rules governing the installation, replacement, alteration, relocation, and use of plumbing systems or plumbing materials shall be those contained in the international plumbing code, 1997 edition, except for sections 104.2, 105.3 to 105.3.3, 106.5.1, 106.5.2, 106.5.3, 107.1.2, 107.1.2.1, 107.1.2.2, 107.1.2.3, 108.3, 108.7 to 108.7.3, 109.2 to 109.7, 403.5, 419.3, 602.3 to 602.3.5.1, 608.17 to 608.17.8, 904.7, 917 to 917.8, and 1106.6. With the exceptions noted, the code is adopted in these rules by reference. The code is available for inspection at the Lansing office of the Michigan department of consumer and industry services,

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bureau of construction codes. The code may be purchased from the Building Officials and Code Administrators International, Incorporated, 4051 Flossmoor Road, Country Club Hills, Illinois 60478, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$35.00 each.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

AMENDMENTS AND ADDITIONS TO BASIC PLUMBING CODE

R 408.30711 Title and scope.

Rule 711. Sections 101.1 and 101.2 of the code are amended to read as follows:

101.1. Title. This part shall be known as the Michigan plumbing code and is hereinafter referred to as "the plumbing code" or "the code." This part shall control all matters concerning the installation, replacement, alteration, relocation, and use of plumbing systems or plumbing materials as herein defined and shall apply to existing or proposed buildings and structures in the state. 101.2. Scope. The design and installation of plumbing systems, including sanitary and storm drainage, sanitary facilities, medical gas systems, water supplies, storm water and sewage disposal in buildings, shall comply with the requirements of this code. The design and installation of gas piping, chilled water piping in connection with refrigeration process and comfort cooling, and hot water piping in connection with building heating shall conform to the requirements of the mechanical code, being R 408.30901 et seq. of the Michigan Administrative Code, promulgated under Act No. 230 of the Public Acts of 1972, as amended, being 125.1501 et seq. of the Michigan Compiled Laws, and administered by the Michigan department of consumer and industry services. The design and installation of piping for fire sprinklers and standpipes shall conform to the requirements of the building code, being R 408.30401 et seq. of the Michigan Administrative Code. Water and drainage connections to such installations shall be made in accordance with the requirements of the code.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30712 Existing use.

Rule 712. Section 102.2 of the code is amended to read as follows:

102.2. Continuation of existing use. The legal use and occupancy of any structure existing on the effective date of enforcement, or for which it had been approved, may be continued without change, except as specifically covered in the code or deemed necessary by the plumbing official for the general safety and welfare of the occupants and the public.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30713 Approval.

Rule 713. Section 105.1.1 is added to the code and section 105.2 of the code is amended to read as follows:

105.1.1. Approved material and equipment. These items shall be approved or disapproved in accordance with section 21 of the act, and rules for the use of these items shall be promulgated in accordance with section 6 of the act. 105.2. Alternative materials, methods, and equipment. The provisions of the code are not intended to prevent the use of any material or method of construction not specifically prescribed by the code if the alternate material or method of construction has been approved by the Construction Code Commission.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30714 Plumbing official; qualifications.

Rule 714. Section 103.1 of the code is amended to read as follows:

103.1. General. The position of plumbing official is created. The plumbing official shall possess either a master plumber's or journey plumber's license issued under Act No. 266 of the Public Acts of 1929, as amended, being 338.901 et seq. of the Michigan Compiled Laws, to qualify as the plumbing official for the purpose of the code.

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History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30715 Permits.

Rule 715. Section 106.1 of the code is amended to read as follows:

106.1. Action on application. The enforcing agency shall examine and issue a plumbing permit in accordance with section 11 of the act. A plumbing permit is not transferable.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30716 Fees.

Rule 716. Section 106.5 of the code is amended to read as follows:

106.5. Fees. A permit to begin work for the new construction, alteration, removal, demolition, or other plumbing system installations shall not be issued until the fees prescribed by section 22 of the act have been paid to the enforcing agency or other authorized agency of the jurisdiction. An amendment to a permit necessitating an additional fee due to an increase in the estimated cost of the work involved shall not be approved until the additional fee has been paid.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30717 Duties of the code official; right of entry.

Rule 717. Sections 104.1 and 104.5 of the code are amended to read as follows:

104.1. Required. The plumbing official shall enforce the provisions of the act and the code and make inspections and tests as required under the act and the code. 104.5. Right of entry. In the discharge of duties, the plumbing official or an authorized representative may enter any building, structure, or premises in the jurisdiction to enforce the provisions of the act and the code under section 12 of the act.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30718 Unlawful acts; violations; penalties.

Rule 718. Section 108.2.1 is added to the code, and sections 108.1 and 108.4 of the code are amended, to read as follows:

108.1. Unlawful acts. A person, firm, or corporation shall not erect, alter, extend, repair, install, or use any plumbing installations, equipment, or system regulated by the code, or cause the same to be done, contrary to, in conflict with, or in violation of, any of the provisions of the code or the act.

108.2.1. Violations. Written notice of any violation of the code shall be given by the plumbing official to the violator. Within 7 days of receipt of notice and upon failure to remove the violations, prosecution may be commenced against the violator.

108.4. Violation penalties. Prohibited acts and penalties shall be in accordance with section 23 of the act.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30719 Stop work order.

Rule 719. Section 108.5 of the code is amended, and section 108.5.1 is added to the code, to read as follows:

108.5. Notice to owner. Upon notice from the plumbing official that plumbing work on a building or structure, on a plumbing system in a building or structure, or adjacent to a building or structure is being performed contrary to the code or in an unsafe and dangerous manner, the person performing the work shall stop the work in accordance with section 12 of the act.

108.5.1. Unlawful continuance. A person who continues work in or about a structure after having been served with a stop-work order, except for work that the person is directed to perform to remove a violation or unsafe condition, is subject to penalty provisions under section 23 of the act.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30720 Definitions of plumbing terms.

Rule 720. Section 202.0 of the code is amended to read as follows:

202.0. Definition of plumbing terms. "Plumbing official" means the officer or other designated authority

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charged with the administration and enforcement of the plumbing code as adopted or amended, except, when used in section 105.2 of the code, the term means the construction code commission and not a local plumbing official.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30722

Source: 1997 AACS.

R 408.30723

Source: 1997 AACS.

R 408.30724 Rescinded.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30725 Industrial or commercial wastes.

Rule 725.Section 302.2 of the code is amended to read as follows:

302.2.Industrial or commercial wastes. Industrial or commercial wastes shall not be introduced into the public sewer or private disposal system without receiving prior approval in the following manner:

(a)Industrial or commercial wastes discharged to a public sewer system are subject to review, approval, and regulation by the owner of the sewage treatment system under the authority of the federal water pollution control act of 1972, as amended, 33 U.S.C.1251 et seq., and sections 3101 to 3119 of Act No. 451 of the Public Acts of 1994, as amended, being 324.3101 to 324.3119 of the Michigan Compiled Laws.

(b)Industrial or commercial wastes discharged to an on-site disposal system are subject to review, approval, and regulation by the Michigan department of environmental quality under the authority of sections 3101 to 3119 of Act No. 451 of the Public Acts of 1994, as amended, being 324.3101 to 324.3119 of the Michigan Compiled Laws.

(c)Industrial or commercial wastes discharged to an on-site holding tank are subject to review, approval, and regulation under sections 3101 to 3119, 11101 to 11152, and 12101 to 12118 of Act No. 451 of the Public Acts of 1994, as amended, being 324.3101 to 324.3119, 324.11101 to 324.11152 and 324.12101 to 324.12118 of the Michigan Compiled Laws, and the federal resource conservation and recovery act of 1976, as amended, 42 U.S.C.6901 et seq.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30725a Radioactive material.

Rule 725a.Section 302.2.1 is added to the code to read as follows:

302.2.1.Radioactive material. Possession of radioactive material is regulated by state or federal license. The disposal of radioactive material shall not create a hazard to operational or maintenance personnel of the institution or to the public. Radioactive waste disposal is controlled by the Michigan department of environmental quality by conditions for disposal in a radioactive material license issued under the authority of part 135 of Act No.368 of the Public Acts of 1978, as amended, being 333.13501 et seq.of the Michigan Compiled Laws, and the ionizing radiation rules, being R 325.5001 et seq. Of the Michigan Administrative Code, or is controlled by the United Statesnuclear regulatory commission by conditions for disposal in a license issued under the authority of the atomic energy act of 1954, 42 U.S.C.2011 et seq.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30725b Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30725c Urinal partitions.

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Rule 725c. Section 310.5 is added to the code to read as follows:

310.5. Urinal partitions. Each urinal that is used by the public or by employees shall be separated by a partition, wall, or water closet privacy compartment on each side to secure privacy.

Exception: If a urinal that is not required is installed in a room which is intended for a single occupant and which has a door that can be locked from the inside, then separate privacy partitions are not required.

History: 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30726 Rescinded.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30728 Sewer depth.

Rule 728. Section 305.6.1 of the code is amended to read as follows:

305.6.1. Sewer depth. A building sewer that connects to a private disposal system shall be a minimum of 8 inches to the top of the pipe below finished grade. All other building sewers shall be installed below recorded frost penetration.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30730

Source: 1997 AACS.

R 408.30731

Source: 1997 AACS.

R 408.30732, R 408.30733

Source: 1997 AACS.

R 408.30734 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30735 Hot water supply required.

Rule 735. Section 607.1 of the code is amended to read as follows:

607.1. Where required. In occupied structures, hot water shall be supplied to all plumbing fixtures and equipment utilized for bathing, washing, culinary purposes, cleansing, laundry, or building maintenance.

Exception: In nonresidential occupancies, hot water or tempered water shall be supplied for bathing and washing purposes. Tempered water shall be supplied to accessible handwashing fixtures through a control valve that conforms to ASSE 1016, the standard of the American society of sanitary engineering, which is adopted in these rules by reference. The standard may be purchased from the American Society of Sanitary Engineering, 28901 Clemens Road, Suite 100, West Lake, Ohio 44145, at a cost as of the time of adoption of these rules of \$20.00 each, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$20.00 each, plus mailing costs. These standards may be inspected at the Okemos office of the Michigan department of consumer and industry services.

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30736

Source: 1997 AACS.

R 408.30737 Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1979 AC; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

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R 408.30738

Source: 1997 AACs.

R 408.30738a Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30739

Source: 1997 AACs.

R 408.30740 Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30740a Drainage piping in food storage areas.

Rule 740a. Section 701.9 is added to the code to read as follows:

701.9. Drainage piping in food storage areas. Refer to R325.25103 of the department of agriculture, which prohibits the installation of exposed soil or waste piping above any working, storage, or eating surfaces in food service establishments.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30740b Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30740c Underground building drainage and vent pipe; table.

Rule 740c. Table 702.2 is amended to read as follows:

Table 702.2

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 2661; ASTM F 628; CSA B181.1
Cast-iron pipe	ASTM A 74; CISPI 301; ASTM A 888
Copper or copper-alloy tubing (type K or L)	ASTM B75; ASTM B 88; ASTM B 251
Polyolefin pipe	CSA CAN/CSA-B181.3
Polyvinyl chloride (PVC) plastic pipe (type DWV)	ASTM D 2665; ASTM D 2949; ASTM F 891; CSA CAN/CSA-B181.2

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30741

Source: 1997 AACs.

R 408.30741a

Source: 1997 AACs.

R 408.30741b

Source: 1997 AACs.

R 408.30741c Food-handling establishments.

Rule 741c. Section 802.1.1 of the code is amended, and section 802.1.1.1 is added to the code, to read as follows:

802.1.1. Food-handling establishments. Food service establishments, food establishments, or institutions, other than private dwellings, shall have the drains from all fixtures, appliances, compartments, refrigeration receptacles, appurtenances, or devices that are used, designed for use, or intended to be used, in the manufacture, preparation, processing, storage, or handling of food, ice, or drinks connected to appropriately

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located waste pipes that shall discharge atmospherically by means of an air gap over a waste sink or other approved receptacle. Ice-making machines and ice storage bins indirect waste lines shall discharge independently to the waste receptacle.

802.1.1.1.Drains from dish machines and sinks. Drains from dish machines and sinks used in cleaning and sanitizing utensils and equipment shall be indirectly connected to the drainage system by means of an air gap or air break over a waste sink or other approved receptacle. Any of the following are approved alternatives:

(a) Pot and pan washing sinks may have the wash compartment directly connected if the rinse and sanitizing compartments are indirectly connected to the drainage system.

(b) Pot and pan washing sinks and dish machines may be directly connected to the drainage system if a floor drain is installed on the same branch serving the pot and pan washing sink or dish machine. The floor drain connection shall be located a maximum distance of 3 feet from the pot and pan washing sink or dish machine in the horizontal portion of the drain. The floor drain branch shall not be more than 18 inches total developed length.

(c) When required, grease interceptors connected to the pot and pan washing sink wash compartment shall be directly connected to the drainage system, unless otherwise approved by the administrative authority.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30742, R 408.30743

Source: 1997 AACS.

R 408.30743a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1985 MR 3, Eff. Apr. 3, 1985; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30743b

Source: 1997 AACS.

R 408.30743c Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744

Source: 1997 AACS.

R 408.30744a Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744b Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744c Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744d Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744e Main vent required.

Rule 744e. Section 903.1 of the code is amended to read as follows:

903.1. Main vent required. Every building in which plumbing is installed shall have at least 1 main stack which is not less than 3 inches in diameter and which shall run undiminished in size from the building drain through to the open air.

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History: 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30744f Rescinded.

History: 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30745

Source: 1997 AACS.

R 408.30745a

Source: 1997 AACS.

R 408.30745b

Source: 1997 AACS.

R 408.30746 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30746a

Source: 1997 AACS.

R 408.30746b

Source: 1997 AACS.

R 408.30747

Source: 1997 AACS.

R 408.30747a Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30747b Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30747c

Source: 1997 AACS.

R 408.30748 Rescinded.

History: 1954 ACS 91, June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30748a—R 408.30748c

Source: 1997 AACS.

R 408.30749 Individual venting required.

Rule 749.Section 906.4 is added to the code to read as follows:

906.4.Individual venting required. If fixtures other than water closets discharge into only a 3-inch horizontal branch or building drain downstream from a water closet, then each fixture connecting less than 54 inches downstream from the water closet flange shall be individually vented.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30749a Rescinded.

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History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30750 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30751

Source: 1997 AACS.

R 408.30751a Rescinded.

History: 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30752

Source: 1997 AACS.

R 408.30752a—R 408.30754

Source: 1997 AACS.

R 408.30753a Roof extensions.

Rule 753a. Section 904.1 of the code is amended to read as follows:

904.1. Roof extension. All open vent pipes that extend through a roof shall be terminated at least 1 foot (305 mm) above the roof, except that if a roof is to be used for any purpose other than weather protection, then the vent extensions shall be run not less than 7 feet (2134 mm) above the roof.

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30754a Frost closure.

Rule 754a. Section 904.2 of the code is amended to read as follows:

904.2. General. To prevent frost closure, every vent extension through a roof shall be a minimum of 3 inches in diameter. Any increase in the size of the vent shall be made inside the building a minimum of 1 foot below the roof or inside the wall.

History: 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30754b Extensions outside a structure.

Rule 754b. Section 904.6.1 is added to the code to read as follows:

904.6.1. Extensions outside a structure. Vent pipes installed on the exterior of the structure shall be protected against freezing by insulation or heat, or both.

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30754c Air admittance valves.

Rule 754c. Sections 918.3, 918.3.1, 918.3.2, 918.3.2.1, 918.3.2.2, 918.3.4, 918.3.5, 918.3.6, 918.3.7, and 918.3.8 of the code are amended to read as follows:

918.3 Air admittance valves general. Vent systems utilizing air admittance valves shall comply with this section. Individual and branch-type air admittance valves shall conform to ASSE 1051, the standard of the American society of sanitary engineering, which is adopted in these rules by reference. The standard may be purchased from the American Society of Sanitary Engineering, 28901 Clemens Road, Suite 100, West Lake, Ohio 44145, at a cost as of the time of adoption of these rules of \$20.00 each, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$20.00 each, plus mailing costs. The standard may be inspected at the Okemos office of the Michigan department of consumer and industry services. 918.3.1 Installation. The valves shall be installed in accordance with the requirements of this section and the manufacturers installation instructions. Air admittance valves shall be installed after the drain, waste, and vent testing required by section 312.2 or 312.3 of the code has been performed.

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918.3.2 Where permitted. Individual, branch, and circuit vents shall be permitted to terminate with a connection to an air admittance valve. The air admittance valve shall only vent fixtures that are on the same floor level and connect to a horizontal branch drain. The horizontal branch drain shall conform to section 918.3.2.1 or 918.3.2.2 of the code.

918.3.2.1 Location of branch. The horizontal branch drain shall connect to the drainage stack or building drain a maximum of 4 branch intervals from the top of the stack.

918.3.2.2 Relief vent. The horizontal branch shall be provided with a relief vent that shall connect to a vent stack or stack vent or shall extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack or building drain and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be in accordance with section 916.2 of the code and installed in accordance with section 905 of the code. The relief vent shall be permitted to serve as the vent for other fixtures.

918.3.4 Location. The air admittance valve shall be located a minimum of 4 inches (102 mm) above the horizontal branch drain or fixture drain being vented. The air admittance valve shall be located within the maximum developed length permitted for the vent. The air admittance valve shall be installed a minimum of 6 inches (152 mm) above insulation materials.

918.3.5 Access and ventilation. Access shall be provided to all air admittance valves. The valve shall be located within a ventilated space that allows air to enter the valve.

918.3.6 Size. The air admittance valve shall be rated for the size of the vent to which the valve is connected.

918.3.7 Vent required. Within each plumbing system, a minimum of 1 stack vent or vent stack shall extend outdoors to the open air.

918.3.8 Prohibited installations. Air admittance valves shall not be installed in nonneutralized special waste systems as described in chapter 8. Valves shall not be located in spaces utilized as supply or return air plenums.

History: 1999 MR 2, Eff. Mar. 1, 1999

R 408.30755

Source: 1997 AACs.

R 408.30756 Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30756a Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30757 Manholes for larger pipes.

Rule 757. Section 708.8 of the code is amended to read as follows:

708.8. Manholes for larger pipes. For underground piping that is more than 10 inches in diameter, manholes shall be provided and located at every major change of direction, grade, elevation, or size of pipe or at intervals of not more than 400 feet. Metal covers shall be provided for the manholes and shall be of sufficient weight to meet local traffic and loading conditions. Within buildings, manhole covers shall be gastight and the manhole shall be vented with not less than a 4-inch pipe.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30758 Minimum number of plumbing fixtures.

Rule 758. Section 403.1 of the code is amended to read as follows:

403.1. (1) Minimum number of plumbing fixtures. Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number or numbers shown in tables 1 to 23 in subrule (2) of this rule. Types of building occupancy that are not shown in tables 1 to 23 in subrule (2) of this rule shall be considered individually by the plumbing official. The number of occupants shall be determined by 1 of the following:

- (a) Actual number of occupants, supported by owner or agency affidavit.
- (b) Number of fixed seats in places of assembly.

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(c) Occupant load determined under sections 1008 to 1008.3, including table 1008.1.2 of the BOCA national building code, which are adopted by reference in R 408.30401.

(2) Tables 1 to 23 read as follows:

Table No.1

Employees - All Building Use Groups Where Separate Rest Room Facilities are Required For the Employees Exception: Building Use Groups "B", "F", "H", and "S"

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and lavatory is permissible in buildings with a total of 15 or fewer employees.

Urinals shall not be installed in unisex rest rooms.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-15	1	0	1	1-15	1	1
16-36	2	1	1	16-36	3	1
36-55	3	1	2	36-55	4	2
56-80	4	1	2	56-80	5	2
81-110	5	1	3	81-110	6	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 45 persons of each sex, or fraction thereof, starting at 111.

2. Urinals may be substituted for not more than 1/2 of the required number of water closets.

3. Refer to section 412.5 of the code for floor drain requirements.

Table No.2

Building Use Group A-1 and A-5

Theaters, Sports Arenas, Stadiums

Occupant load is composed of 50% of each sex.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	1	1	1-50	3	1
51-100	2	1	1	51-100	4	1
101-150	3	1	2	101-150	5	2
151-300	4	1	3	151-300	7	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each 150 men and 100 women, or fraction thereof, starting at 301.

2. One drinking fountain is required for each 500 persons.

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3. One service sink per floor is required.
4. Urinals may be substituted for not more than 1/2 of the required number of water closets.
5. Each rest room shall have at least 1 floor drain.

Table No.3
Building Use Group A-2 and A-3
Assembly - Food Service Establishments Licensed to
Dispense Alcoholic Beverages on the Premises, Including
Night Clubs, Bars, Cocktail Lounges, and Restaurants

Occupant load is composed of 50% of each sex.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	1	1	1-50	2	1
51-100	2	1	2	51-100	3	2
101-150	3	1	3	101-150	4	3
151-300	4	2	4	151-300	6	4

1. Employees are to be included in the total occupancy count for establishments with an occupancy of 50 or fewer persons. Separate rest room facilities for employees shall not be required for establishments with a total occupancy load of 50 or fewer persons.
2. Separate employee rest rooms are required for establishments with a total occupancy of 51 or more persons. Refer to the employee fixture requirements in table no.1 to determine employee rest room requirements.
3. In addition, 1 water closet and 1 lavatory shall be provided for each additional 200 persons of each sex, or fraction thereof, starting at 501.
4. Food service establishments are required to have a Michigan department of agriculture approved hand wash sink located in the food preparation and alcoholic beverage preparation areas and the dishwashing or utensil-washing area.
5. Each establishment shall have at least 1 service sink. The service sink may be of the floor type with a raised curb and drain.
6. Urinals may be substituted for not more than 1/2 of the required number of water closets.
7. Each rest room shall have at least 1 floor drain.

Table No.4
Building Use Group A-3
Assembly - Food Service Establishments
(Without Alcoholic Beverages)
Including Restaurants, Coffee Shops,
Cafeterias, and Delicatessens

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and 1 lavatory is permissible in establishments with a total occupancy of 15 or fewer persons, including employees. Urinals shall not be installed in unisex rest rooms.

MALES				FEMALES		
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NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	0	1	1-50	1	1
51-100	1	1	1	51-100	2	1
101-150	2	1	2	101-150	3	2
151-300	2	2	3	151-300	4	3

1. Employees are to be included in the total occupancy count for establishments with an occupancy of 50 or fewer persons. Separate rest room facilities for employees shall not be required for establishments with a total occupancy load of 50 or fewer persons.
2. Separate employee rest rooms are required for establishments with a total occupancy of 51 or more persons. Refer to the employee fixture requirements in table no.1 to determine employee rest room requirements.
3. Food service establishments with counter service only (no seating) shall be exempt from the requirement of providing rest room facilities for the public. Employee rest room facilities are required.
4. Food service establishments with counter service only (no seating) of the free-standing kiosk type, or in food courts within malls, shall be exempt from providing rest room facilities for employees if rest room facilities under the same ownership, lease, or control are within 500 feet of the employees' usual working place.
5. In addition, 1 water closet and 1 lavatory shall be provided for each additional 200 persons of each sex, or fraction thereof, starting at 301.
6. Urinals may be substituted for not more than 1/2 of the required number of water closets.
7. Food service establishments shall have at least 1 service sink. The service sink may be of the floor type with a raised curb and drain.
8. Each rest room shall have at least 1 floor drain.
9. Food service establishments are required to have a Michigan department of agriculture approved hand wash sink located in the food preparation area and the dishwashing or utensil-washing area.

Table No.5
Building Use Group A-3
Assembly - General
Exhibition Halls, Libraries, Recreation Centers, Passenger Terminals,
and Other Similar Purpose Assembly Buildings

Occupant load is composed of 50% of each sex.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	0	1	1-50	1	1
51-100	1	1	1	51-100	2	1
101-200	2	1	1	101-200	3	1
201-400	3	1	2	201-400	4	2
401-900	4	1	3	401-900	5	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each 500 men and 350 women, or fraction thereof, starting at 901.
2. One drinking fountain is required for each 1,000 persons.
3. One service sink per floor is required.
4. Urinals may be substituted for not more than 1/2 of the required number of water closets.

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5. Each rest room shall have at least 1 floor drain.

Table No. 6
Building Use Group E
Assembly - Schools
Elementary and Secondary

Occupant load is composed of 50% of each sex.

MALES				FEMALE S			
NUMBE R OF STUDEN TS	WATER CLOSETS	URINAL S	LAVATO RIES	NUMBE R OF STUDEN TS	WATER CLOSETS	LAVATO RIES	DRINKING FOUNTAIN S TOTAL ENROLLM ENT
	E S	E S	E S		E S	E S	
1-40	1 1	1 1	1 1	1-40	2 2	1 1	1
41-80	2 1	2 2	2 2	41-80	4 3	2 2	2
81-120	3 2	3 3	3 3	81-120	6 5	3 3	2
121-150	4 2	4 4	4 4	121-150	8 6	4 4	3
151-200	5 3	5 5	5 5	151-200	10 8	5 5	4
201-300	6 4	7 7	6 6	201-300	13 11	6 6	5
301-400	7 5	8 8	7 7	301-400	15 13	7 7	7
401-500	8 6	9 9	9 9	401-500	17 15	9 9	8
501-600	9 7	10 10	11 11	501-600	19 17	11 11	9
601-800	10 8	11 11	12 12	601-800	21 19	12 12	11
801-1000	11 9	12 12	13 13	801-1000	23 21	13 13	12

"E" - Elementary schools

"S" - Secondary schools, including post-high school, colleges,
and universities.

1. In addition, 1 fixture of each type listed shall be provided for each additional 200 persons of each sex, or fraction thereof, starting at 1,001.
2. One service sink per floor is required.
3. Urinals shall not be installed in the individual classroom rest rooms in elementary schools. Required urinals for elementary schools shall be placed in group rest rooms.
4. Refer to section 412.5 of the code for floor drain requirements.
5. Faculty and employee rest rooms shall be separate from student rest rooms in elementary schools and high schools. Employee fixture requirements shall be determined from the employee fixture requirements in table no. 1.

Table No.7
Building Use Group A-4
Assembly - Churches

Occupant load is composed of 50% of each sex.

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MALES				FEMALE		
NUMBE R	WATER CLOSET S	URINAL S	LAVATO RIES	NUMBE R	WATER CLOSETS	LAVATO RIES
1-50	1	0	1	1-50	1	1
51-150	1	1	1	51-150	2	1
151-300	2	1	1	151-300	3	1
301-450	3	1	2	301-450	4	2
451-600	4	1	3	451-600	5	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 200 persons of each sex, or fraction thereof, starting at 601.
2. One drinking fountain is required in each building.
3. One service sink is required in each building.
4. Urinals may be substituted for not more than 1/2 of the required number of water closets.
5. Refer to section 412.5 of the code for floor drain requirements.
6. Plumbing fixtures may be located in adjacent buildings under the ownership or control of the church when accessible during periods that the church is occupied.

Table No.8
Building Use Group B
Business - Professional Services, Offices,
Civic Administration Activities, Banks,
Research Laboratories, Outpatient Clinics

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and 1 lavatory is permissible in buildings with a total of 15 or fewer occupants.

Urinals shall not be installed in unisex rest rooms.

MALES				FEMALE		
NUMBE R	WATER CLOSETS	URINAL S	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-7	1	0	1	1-7	1	1
8-20	1	1	1	8-20	2	1
21-40	2	1	1	21-40	3	1
41-60	3	1	2	41-60	4	2

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 50 persons of each sex, or fraction thereof, starting at 61.
2. One service sink per floor is required. This requirement shall be waived if 75% of the floor area of the business is carpeted.
3. One drinking fountain is required for each 100 persons. For buildings that are 5,000 square feet and less, refer to section 410.1 of the code.

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4. Urinals may be substituted for not more than 1/2 of the required number of water closets.
5. Refer to section 412.5 of the code for floor drain requirements.
6. Required rest room facilities may be located in central core rest rooms if all of the following requirements are complied with:
 - a. Required rest room facilities are accessible to occupants of the building at all times.
 - b. Required rest room facilities are located on each floor of a multistory building.
 - c. Occupants are not required to travel more than 500 feet to the required rest room facility area.

TABLE NO. 9
BUILDING USE GROUP F AND H
FACTORIES AND INDUSTRIAL USES, INCLUDING HIGH-
HAZARD BUILDINGS AND STRUCTURES

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and 1 lavatory is permissible in buildings with a total of 15 or fewer occupants. Urinals shall not be installed in unisex rest rooms.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-7	1	0	1	1-7	1	1
8-15	1	1	1	8-15	2	1
16-30	2	1	1	16-30	3	1
31-45	3	1	2	31-45	4	2

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 25 persons of each sex, or fraction thereof, starting at 46.
2. One drinking fountain is required for each 75 persons.
3. One service sink is required in each building.
4. Urinals may be substituted for not more than 1/2 the required number of water closets.
5. Refer to section P-1211.4 for floor drain requirements.
6. Emergency shower and eye wash stations are to be installed as per the requirements of sections P-1210.1 and P-1210.2.

TABLE NO. 10
BUILDING USE GROUP I-1
ADULT GROUP HOMES, ADULT CONGREGATE HOMES GOVERNED
BY DEPARTMENT OF SOCIAL SERVICES RULES PROMULGATED BY
AUTHORITY OF SECTION 3 OF ACT NO. 287 OF PUBLIC ACTS OF 1972,
BEING §331.683 OF THE MICHIGAN COMPILED LAWS

WATER CLOSETS	LAVATORIES	BATH/SHOWER
1 per 8 persons	1 per 8 persons	1 per 8 persons

1. Laundry facilities shall be provided.
2. Hot water temperature shall range from 110 degrees Fahrenheit to 120 degrees Fahrenheit at the fixtures.
3. At least 1 water closet and 1 lavatory shall be provided on each floor that has resident bedrooms.

TABLE NO. 11
BUILDING USE GROUP I-2
INSTITUTIONAL - HOSPITALS, NURSING HOMES, SANITARIUMS, HOMES FOR THE AGED

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1. Each patient sleeping room, exclusive of intensive care or special care rooms, shall provide a water closet and a lavatory in a room directly accessible from the sleeping room.

Exception: In a licensed home for the aged, resident toilet facilities shall be located in separate rooms or stalls and shall be provided in the ratio of at least 1 lavatory and water closet for every 8 resident beds per floor.

2. Bathing facilities

Hospitals - 1 fixture per 12 beds

Nursing homes - 1 fixture per 20 beds

Homes for the aged - 1 fixture per 15 beds

3. One drinking fountain located on each floor level.

4. One service sink located on each floor level.

5. A visitor rest room consisting of 1 water closet and 1 lavatory located on each floor level.

6. Employee rest room facilities shall be separate from patient and public facilities.

TABLE NO. 12
BUILDING USE GROUP I-3
INSTITUTIONAL - JAILS, PRISONS, REFORMATORIES

MINIMUM SECURITY

WATER CLOSETS

LAVATORIES

SHOWERS

1 per 8 inmates or
fraction thereof

1 per 8 inmates or
fraction thereof

1 per 15 inmates
or fraction thereof

MEDIUM AND MAXIMUM SECURITY

WATER CLOSETS

LAVATORIES

SHOWERS

1 per cell

1 per cell

1 per 15 inmates
or fraction thereof

1. One drinking fountain is required for each 100 inmates.

2. One service sink is required in each building.

3. Urinals may be substituted for not more than 1/2 the required water closets in low-security prisons.

4. Employee rest room facilities shall be separate from inmate facilities. Employee fixture requirements shall be determined from the employee fixture requirements in table no. 1.

5. One water closet and lavatory shall be provided for each 75 visitors. Unisex facilities are permitted for visitor rest rooms. Urinals shall not be installed in unisex rest rooms.

TABLE NO. 13
BUILDING USE GROUP M
MERCANTILE - RETAIL STORES, SHOPS, SALES ROOMS, SHOPPING MALLS
EXCEEDING 5,000 SQUARE FEET OF FLOOR AREA
CUSTOMERS ONLY

Occupancy load is composed of 50% of each sex, unless the owner or agent provides a written statement indicating a variance from this percentage. A variance will be permitted in the male and female ratio to reflect the adjusted ratio if the total number of required fixtures are not reduced.

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MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	0	1	1-50	1	1
51-100	1	1	1	61-100	2	1
101-200	2	1	1	101-200	3	1
201-300	3	1	2	201-300	4	2
301-700	4	1	3	301-700	5	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 400 persons of each sex, or fraction thereof, starting at 701.
2. One drinking fountain is required for each 1,000 persons. At least 1 drinking fountain per floor is required.
3. One service sink per floor is required.
4. Urinals may be substituted for not more than 1/2 of the required number of water closets.
5. Refer to section P-1211.4 for floor drain requirements.
6. Employee fixture requirements shall be determined from the employee fixture requirements in table no. 14.
7. Facilities for customers shall not be required in stores that have less than 5,000 square feet. In shopping centers and shopping malls, required facilities shall be based on total square footage and facilities may be installed in individual stores or in a central toilet area if the distance of travel from the main entrance of any store is not more than 500 feet.
8. The total square footage of the theaters, restaurants, and other assembly use groups located within malls may be subtracted from the total square footage when determining occupant load. Fixture requirements for these assembly use groups shall be determined from the respective tables relating to assembly use groups.
9. Following determination of total occupant load in mercantile establishments that have more than 5,000 square feet of floor area, the total employee count may be subtracted from the total occupant load to determine required customer facilities.

TABLE NO. 14
BUILDING USE GROUP M
MERCANTILE - RETAIL STORES, SHOPS, SALES ROOMS, SHOPPING MALLS
EMPLOYEES ONLY

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and 1 lavatory is permissible in buildings with a total of 15 or fewer employees.

Urinals shall not be installed in unisex rest rooms.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-7	1	0	1	1-7	1	1
8-15	1	1	1	8-15	2	1
16-35	2	1	1	16-35	3	1
36-55	3	1	2	36-55	4	2
56-80	4	1	2	56-80	5	2
81-110	5	1	3	81-110	6	3

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 45 persons of each sex, or fraction thereof, starting at 111.
2. One drinking fountain per store is required. For stores that have 5,000 square feet and less, refer to section P-1209. 1.
3. One service sink per store is required. This requirement shall be waived if 75% of the floor area of the

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store is carpeted.

4. Urinals may be substituted for not more than 1/2 of the required number of water closets.
5. Refer to section P-1211.4 for floor drain requirements.
6. The requirements for employee plumbing fixtures shall be waived for individual stores in shopping malls when both of the following conditions are met:
 - a. The number of employees are 5 or less per shift.
 - b. Alternate rest room facilities that are located within the shopping mall on the same floor are available and are within a travel distance of 500 feet or less.
7. Separate employee facilities may be waived when both of the following conditions are met:
 - a. The number of employees is added to customer occupancy load.
 - b. Employee-customer rest rooms are available to occupants at all times.

TABLE NO. 15
BUILDING USE GROUP R-1
HOTELS AND MOTELS

WATER CLOSETS	LAVATORIES	BATH/SHOWERS
1 per guest room	1 per guest room	1 per guest room

One service sink per floor is required.

TABLE NO. 16
BUILDING USE GROUP R-2
RESIDENTIAL - DORMITORIES

Occupant load is composed of 50% of each sex, unless designated otherwise.

MALES			FEMALES		
NUMBER	WATER CLOSETS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-8	1	1	1-8	1	1
9-16	2	1	9-16	2	1
17-24	3	2	17-24	3	2
25-32	4	2	25-32	4	2

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 8 persons of each sex, or fraction thereof, starting at 33.
2. Urinals may be substituted for not more than 1/2 of the required number of water closets.
3. One bathing facility for each sex shall be provided for every 8 persons or fraction thereof.
4. One drinking fountain is required for each 75 persons.
5. One laundry facility is required for each 50 persons.
6. One service sink per floor is required.

TABLE NO. 17
BUILDING USE GROUP R-2
RESIDENTIAL - MULTIFAMILY (MORE THAN 2 UNITS)

WATER CLOSETS	LAVATORIES	BATH/SHOWERS	KITCHEN SINKS
1 per dwelling	1 per dwelling	1 per dwelling	1 per dwelling

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unit

unit

unit

unit

One laundry facility shall be provided for each 20 dwelling units or fraction thereof. Laundry facilities may be located in the same building as the dwelling units or in a community building that is accessible to the tenants of the complex.

TABLE NO. 18
BUILDING USE GROUP R-3
RESIDENTIAL - 1- AND 2- FAMILY DWELLINGS

WATER CLOSETS	LAVATORIES	BATH/SHOWERS	KITCHEN SINKS	LAUNDRY FACILITIES
1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit

TABLE NO. 19
BUILDING USE GROUP - S
STORAGE

Occupant load is composed of 50% of each sex.

One unisex rest room consisting of 1 water closet and 1 lavatory is permissible in buildings with a total of 15 or fewer occupants. Urinals shall not be installed in unisex rest rooms.

MALES				FEMALES		
NUMBER	WATER CLOSETS	URINALS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-50	1	0	1	1-50	1	1
51-100	1	1	1	51-100	2	1

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 100 persons of each sex, or fraction thereof, starting at 101.

2. Urinals may be substituted for not more than 1/2 of the required number of water closets.

3. One drinking fountain is required in each building. Refer to section P-1209.1.

4. One service sink is required in each building.

5. Plumbing fixture requirements shall be waived if equivalent facilities are located in adjacent buildings under the same ownership, lease, or control, and if the maximum distance of travel from the employees' usual working area to the plumbing facilities is not more than 500 feet.

TABLE NO. 20
WORKERS' TEMPORARY FACILITIES

Occupant load is composed of 50% of each sex.

MALES			FEMALES		
NUMBER	WATER CLOSETS	LAVATORIES	NUMBER	WATER CLOSETS	LAVATORIES
1-30	1	1	1-30	1	1
31-60	2	1	31-60	2	1
61-90	3	2	61-90	3	2

1. In addition, 1 water closet and 1 lavatory shall be provided for each additional 30 persons of each sex, or

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fraction thereof, starting at 91.

2. Urinals may be substituted for not more than 1/2 of the required number of water closets.

3. One drinking fountain or the equivalent, such as a closed vessel with spigot containing cold potable water, is required for each 100 persons.

TABLE NO. 21
PUBLIC AND SEMIPRIVATE SWIMMING POOLS

Governed by the Department of Public Health rules promulgated by authority of Act No. 368 of the Public Acts of 1978, as amended, being §333.1101 et seq. of the Michigan Compiled Laws.

NUMBER OF TOILET FIXTURES

MAXIMUM BATHER CAPACITY*	NUMBER OF SHOWERS FOR EACH SEX**	MALES		FEMALES
		WATER CLOSETS	URINALS	WATER CLOSETS
1-50	1	2	2	4
51-100	2	2	2	4
101-200	3	3	3	5
201-300	4	2	3	5
301-500	5	3	3	6
501-1000	6	3	4	7

*The number of fixtures for a larger bather capacity shall be extrapolated.

**At a swimming pool used by classes, 1 shower for every 3 people in the largest class shall be provided for each sex.

1. A toilet room shall have 1 lavatory for every 2 toilet fixtures, including urinals.

2. Refer to section P-1211.4 for floor drain requirements.

TABLE NO. 22
CHILD CARE CENTER, DAY CARE CENTER, NURSERY SCHOOL

Governed by Department of Social Services rules promulgated by authority of section 2 of Act No. 116 of the Public Acts of 1973, as amended, being §722.112 of the Michigan Compiled Laws.

1. A center shall provide at least 1 water closet and 1 lavatory for every 20 children or fraction thereof beyond the first 20.

2. A center operating with children in attendance for 5 or more continuous hours a day shall have 1 water closet and 1 lavatory for every 15 children or fraction thereof beyond the first 15.

3. Refer to section P-1211.4 for floor drain requirements.

4. Hot water temperatures shall not be more than 120 degrees Fahrenheit at outlets accessible to children.

TABLE NO. 23
CHILDREN'S CAMPS

Governed by Department of Social Services rules promulgated by authority of section 2 of Act No. 116 of the Public Acts of 1973, as amended, being §722.112 of the Michigan Compiled Laws.

PERSONS OF EACH SEX TO BE SERVED	MALE WATER CLOSETS	FEMALE WATER CLOSETS	MALE OR FEMALE LAVATORIES SHOWERS	
1-10	1	1	1	1
11-20	2	2	1	1
21-40	3	3	2	2

1. In addition, 1 fixture of each type listed shall be provided for each additional 20 persons of each sex, or

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fraction thereof, starting at 41.

2. Urinals may be substituted for not more than 1/2 of the required number of water closets.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992

R 408.30758a—R 408.30758d

Source: 1997 AACs.

R 408.30759 Rescinded

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1985 MR 3, Eff. Apr. 3, 1985

R 408.30759a Number of occupants of each sex.

Rule 759a. Section P-1202.3 of the code is amended to read as follows:

P-1202.3. Number of occupants of each sex: The number of fixtures shall be based on an occupant load composed of 50% of each sex.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992

R 408.30759b Location of employee facilities.

Rule 759b. Section 403.4 of the code is amended to read as follows:

403.4. Location of employee facilities. Toilet facilities shall be accessible within the employees' regular working area. The path of travel to the facilities shall not be more than a travel distance of 500 feet. Employee facilities shall be located on each floor of a multistory building.

Exceptions:

1. Facilities that are required for employees in storage buildings or kiosks located in adjacent buildings under the same ownership, lease, or control shall be a maximum travel distance of 500 feet from the employees' regular working area.

2. Employee facilities shall be either separate or combined with customer facilities. Food service establishments that have a total occupancy of 51 or more persons shall have separate employee rest room facilities.

History: 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30760 Customer facilities.

Rule 760. Section 403.6 of the code is amended to read as follows:

403.6. Customer facilities. Customers, patrons, and visitors shall be provided with public toilet facilities in restaurants, nightclubs, and places of public assembly. Customers, patrons, and visitors shall be provided with public toilet facilities in mercantile buildings of more than 5,000 square feet. In shopping centers and shopping malls, required facilities shall be based on total square footage and facilities may be installed in individual stores or in a central toilet area if the distance of travel from the main entrance of any store does not exceed 500 feet.

History: 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30761 Rescinded.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30761a Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30761b Rescinded.

History: 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

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R 408.30761c Lavatories.

Rule 761c. Section 405.3.3 is added to the code to read as follows:

405.3.3. Lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30762 Floor drains; public toilet rooms.

Rule 762. Section 412.5 is added to the code to read as follows:

412.5. Floor drains; public toilet rooms. In all public toilet rooms that contain a combination of 3 or more water closets or urinals, at least 1 approved floor drain shall be installed connecting to the sanitary system; however, stall urinals may serve as floor drains if the entire floor can be drained to the urinals.

History: 1954 ACS 81, Eff. May 19, 1975; 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30763 Floor drain; floor area.

Rule 763. Section 412.6 is added to the code to read as follows:

412.6. Floor drains according to floor area. In all toilet rooms in which floor drains are required, there shall be at least 1 floor drain for each 400 square feet of floor area or major fraction thereof.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30763a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30763b Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30763c Rescinded.

History: 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30764

Source: 1997 AACS.

R 408.30765

Source: 1997 AACS.

R 408.30765a

Source: 1997 AACS.

R 408.30765b

Source: 1997 AACS.

R 408.30765c

Source: 1997 AACS.

R 408.30765d

Source: 1997 AACS.

R 408.30765e

Source: 1997 AACS.

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R 408.30766
Source: 1997 AACS.

R 408.30766a
Source: 1997 AACS.

R 408.30766b
Source: 1997 AACS.

R 408.30766c
Source: 1997 AACS.

R 408.30766d
Source: 1997 AACS.

R 408.30767
Source: 1997 AACS.

R 408.30767a
Source: 1997 AACS.

R 408.30768
Source: 1997 AACS.

R 408.30768a
Source: 1997 AACS.

R 408.30768b
Source: 1997 AACS.

R 408.30769
Source: 1997 AACS.

R 408.30769a
Source: 1997 AACS.

R 408.30769b
Source: 1997 AACS.

R 408.30769c
Source: 1997 AACS.

R 408.30770
Source: 1997 AACS.

R 408.30770a
Source: 1997 AACS.

R 408.30770b
Source: 1997 AACS.

R 408.30771
Source: 1997 AACS.

R 408.30771a
Source: 1997 AACS.

R 408.30771b

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Source: 1997 AACs.

R 408.30771c

Source: 1997 AACs.

R 408.30771d

Source: 1997 AACs.

R 408.30771e

Source: 1997 AACs.

R 408.30772

Source: 1997 AACs.

R 408.30772a

Source: 1997 AACs.

R 408.30772b

Source: 1997 AACs.

R 408.30772c

Source: 1997 AACs.

R 408.30772d

Source: 1997 AACs.

R 408.30772e

Source: 1997 AACs.

R 408.30773

Source: 1997 AACs.

R 408.30773a

Source: 1997 AACs.

R 408.30773b

Source: 1997 AACs.

R 408.30773c

Source: 1997 AACs.

R 408.30773d

Source: 1997 AACs.

R 408.30774

Source: 1997 AACs.

R 408.30774a

Source: 1997 AACs.

R 408.30774b

Source: 1997 AACs.

R 408.30774c

Source: 1997 AACs.

R 408.30774d

Source: 1997 AACs.

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R 408.30774e
Source: 1997 AACS.

R 408.30774f
Source: 1997 AACS.

R 408.30775
Source: 1997 AACS.

R 408.30775a
Source: 1997 AACS.

R 408.30775b
Source: 1997 AACS.

R 408.30775c
Source: 1997 AACS.

R 408.30775d
Source: 1997 AACS.

R 408.30776
Source: 1997 AACS.

R 408.30776a
Source: 1997 AACS.

R 408.30776b
Source: 1997 AACS.

R 408.30776c
Source: 1997 AACS.

R 408.30777 Scope; water service; distance limits; methods of installation.

Rule 777.Section 601.1 of the code is amended to read as follows:

601.1.Scope. The provisions of this article shall control the design and installation of water supply systems, both hot and cold. Refer to Act No. 399 of the Public Acts of 1976, being 325.1001 et seq. of the Michigan Compiled Laws, for additional requirements on water supply systems pertaining to establishments that are subject to regulation or licensure, or both, by the department of environmental quality. Compliance with the provisions of this article, however, does not relieve any person from complying with the additional requirements imposed upon water supply systems under or pursuant to authority vested in the Michigan department of environmental quality under Act No.399 of the Public Acts of 1976, Act No.368 of the Public Acts of 1978, as amended, and Act No.419 of the Public Acts of 1976, as amended, being 325.1001 et seq., 333.1101 et seq., and 125.1101 et seq., respectively,of the Michigan Compiled Laws, or other applicable provisions of state law.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 10, Eff. Apr. 10, 1982; 1985 MR 3, Eff. Apr. 3, 1985; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30777a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 10, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30777b
Source: 1997 AACS.

R 408.30777c Rescinded.

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History: 1979 ACS 10, Eff. Apr. 10, 1982; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30777d Rescinded.

History: 1979 ACS 10, Eff. Apr. 10, 1982; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30777e Rescinded.

History: 1979 ACS 10, Eff. Apr. 10, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30778 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30778a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30778b Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1992 MR 3, Eff. Apr. 2, 1992; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30778c Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30779 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30779a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30779b Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30780 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30780a Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30780b Rescinded.

History: 1979 ACS 10, Eff. Apr. 27, 1982; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

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R 408.30780c

Source: 1997 AACS.

R 408.30781—R 408.30784

Source: 1997 AACS.

R 408.30785 Relief valve discharge.

Rule 785. Section 504.7.2 of the code is amended to read as follows:

504.7.2. Relief valve discharge. Relief valve discharge pipe shall be rigid pipe approved for water distribution with a rating of 210 degrees Fahrenheit. The discharge piping shall be the same diameter as the relief valve outlet and shall drain by gravity flow. Valves shall not be connected in the relief valve discharge pipe. Relief valves shall not discharge so as to be a hazard, a potential cause of damage, or a nuisance. Discharge pipe from relief valves shall terminate atmospherically not more than 4 inches from the floor with an unthreaded end.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30786 Subsoil pump piping.

Rule 786. Section 1111.3.4 of the code is amended to read as follows:

1111.3.4. Piping. Discharge piping shall meet the requirements of section 1102.2, section 1102.3, or section 1102.4 of the code and shall include a gate valve and a full-flow check valve. Pipe and fittings shall be the same size as, or larger than, pump discharge tapping.

Exception: A gate valve shall not be required when the piping discharges atmospherically above grade.

History: 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30788 Rescinded.

History: 1954 ACS 91, Eff. June 16, 1977; 1979 AC; 1979 ACS 10, Eff. Apr. 27, 1982; 1989 MR 2, Eff. Feb. 28, 1989; rescinded 1999 MR 2, Eff. Mar. 1, 1999.

R 408.30788a

Source: 1997 AACS.

R 408.30795a

Source: 1982 AACS.

R 408.30796

Source: 1985 AACS.

PART 8. ELECTRICAL CODE

R 408.30801 National electrical code; adoption by reference; inspection; purchase.

Rule 801. The standards contained in the national electrical code, 1999 edition, except sections 210-12 (a) and (b) as published by the national fire protection association, shall govern the installation, replacement, alteration, relocation, and use of electrical systems or material. With the exceptions noted, the national electrical code is adopted in these rules by reference and is available for inspection at the Okemos office of the department of consumer and industry services, bureau of construction codes. The National Electrical Code may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$44.00 each.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 3, Eff. July 26, 1980; 1979 ACS 8, Eff. Dec. 16, 1981; 1985 MR 2, Eff. Mar. 7, 1985; 1986 MR 10, Eff. Nov. 13, 1986; 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11,

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Eff. Dec. 7, 1999.

R 408.30806

Source: 1997 AACS.

AMENDMENTS AND ADDITIONS TO ELECTRICAL CODE

R 408.30810

Source: 1997 AACS.

R 408.30812

Source: 1997 AACS.

R 408.30815

Source: 1981 AACS.

R 408.30816

Source: 1981 AACS.

R 408.30817 Condemnation or disconnection of dangerous electrical equipment.

Rule 817. Section 90-11 is added to the code to read as follows:

90-11. When the use of any electrical equipment is found imminently dangerous to human life or property, the enforcing agency may condemn the equipment or disconnect it from its source of electric supply, except that the enforcing agency shall not disconnect the service entrance equipment or utility service drop wires unless the entrance equipment or utility wires in themselves constitute a hazard to life or property. If the enforcing agency condemns or disconnects dangerous equipment, then the agency shall place a red tag on the equipment listing the causes for the condemnation or disconnection and the penalty under the act for the unlawful use of the equipment. The agency shall give written notice of the condemnation or disconnection and the causes for condemning or disconnecting the equipment to the owner or the occupant of the building, structure, or premises. A person shall not remove the tag or reconnect the electrical equipment to its source of electric supply, or use or permit the use of electrical current in the electrical equipment, until the causes for the condemnation or disconnection are remedied and a permit for the electrical repairs of the equipment is obtained from the enforcing agency.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30818 Permits and certificates.

Rule 818. Sections 90-12, 90-13, 90-14, 90-15, 90-16, 90-17, 90-18, 90-19, 90-20, and 90-21 are added to the code to read as follows:

90-12. A person shall not equip a building with electrical conductors or equipment or make an alteration of, change in, or addition to, electrical conductors or equipment without receiving a written permit to do the work described. If the electrical installation or alterations of, changes in, or addition to, electrical conductors or equipment are found to be in compliance with the provision of the code and if the work has passed the inspection of the enforcing agency, then the enforcing agency shall, upon the request of the permit holder to whom the permit was issued, issue a certificate of final electrical inspection. The certificate certifies that the provisions of the code have been complied with. This section does not apply to installations that are referred to in section 7(3)(a), (b), (c), (d), (e), (f), (h), (k), (l), or (n) of 1956 PA 217, MCL §338.887(3)(a), (b), (c), (d), (e), (f), (h), (k), (l), or (n).

90-13. (1) To obtain electrical permits, an applicant shall be 1 of the following:

- (a) A holder of an electrical contractor license.
- (b) A person, firm, or corporation holding an affidavit as provided by R 338.1039a.
- (c) A homeowner who occupies or will occupy a single-family dwelling and other accessory structures located on the same lot intended for use by the homeowner for which the permit is obtained and who will install the electrical equipment as certified by the homeowner on the permit application in accordance with section

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10(4) of 1972 PA 230, MCL §125.1510(4).

(2) To obtain a permit for a fire alarm system, as defined in section 1a(1) of 1956 PA 217, MCL §338.881a (1), an applicant shall be 1 of the following:

- (a) A holder of an electrical contractor license.
- (b) A holder of a fire alarm specialty contractor license.
- (c) A homeowner qualifying under section 90-13(c) of the code.

(3) To obtain a permit for an electrical sign or outline lighting, as defined in section 1b(1) and (2) of 1956 PA 217, MCL §338.881b(1) and (2), an applicant shall be 1 of the following:

- (a) A holder an electrical contractor license.
- (b) A holder of a sign specialty contractor license.
- (c) A homeowner qualifying under section 90-13(c) of the code.

(4) To obtain a permit for electrical wiring associated with the installation, removal, alteration, or repair of a water well pump on a single-family dwelling to the first point of attachment in the house from the well, an applicant shall be 1 of the following:

- (a) A holder of an electrical contractor license.
- (b) A registered pump installer under part 127 of 1978 PA 368, MCL §§333.12701 to 333.12771.
- (c) A homeowner qualifying under section 90-13(c) of the code.

(5) To obtain a permit for wiring associated with existing mechanical and plumbing systems referenced in section 7(3)(i) of 1956 PA 217, MCL 338.887(3)(i), a person shall be 1 of the following:

- (a) A holder of an electrical contractor's license.
- (b) A holder of a mechanical contractor's license issued in accordance with section 6(3)(a),(b),(d),(e), and (f) of 1984 PA 192, MCL 338.976(3)(a),(b),(d),(e), and (f).
- (c) A holder of a plumbing contractor's license issued in accordance with 1929 PA 266, MCL 338.901 et seq.

90-14. An applicant for a permit under the code shall submit an application on a form that is furnished by the enforcing agency, shall include a description of the proposed electrical work, and shall sign the application as set forth in section 90-13 of the code.

90-15. The enforcing agency shall review the application, construction documents, and other data filed by an applicant for a permit. If the enforcing agency finds that the proposed work conforms to the requirements of the code and related laws and ordinances and that the fees are paid, then the agency shall issue a permit to the applicant.

90-16. A permit that is issued in violation of the laws of this state or as a result of false or fraudulent information or misinterpretation of conditions is subject to revocation at the direction of the enforcing agency. The enforcing agency shall notify the person holding the permit to appear and show cause why the permit should not be revoked. Failure to appear is sufficient grounds for revocation of the permit.

90-17. If work for which a permit is issued is not started within 6 months of the date of permit issuance or if work is abandoned for a period of 6 months, then the permit shall lapse and cease to be in effect. The enforcing agency shall provide notice of this requirement to the permit holder.

90-18. If a person to whom a permit is issued for the installation and inspection of electrical conductors and electrical equipment quits the installation for any reason, then the person shall notify the enforcing agency.

90-19. If an installation is partially completed, then a permit holder, upon quitting the installation, shall notify the enforcing agency and shall request an inspection. The inspector shall record the acceptance of, or violations against, the work installed on the permit record according to the findings of the inspector. The enforcing agency shall not grant a refund to the permit holder of the permit fee covering electrical equipment installed and inspected.

90-20. If a permit holder quits an installation after the electrical equipment is installed and fails to notify the enforcing agency, then the building owner or his or her agent may notify the enforcing agency and request inspection. Upon inspection, the enforcing agency shall send the permit holder a notice of a violation. The owner may then secure another licensed contractor to proceed with the work if the new contractor is properly covered by a permit.

90-21. An electrical permit is not transferable.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

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R 408.30819 Plans and specification.

Rule 819. Sections 90-22 and 90-22a are added to the code to read as follows:

90-22. An applicant shall submit a detailed set of plans and specifications with the application for an electrical permit for any wiring or alteration to an electrical system if the system requires installation of electrical equipment that has an ampacity of more than 400 amperes for the service or feeder and if the calculated floor area in a building is more than 3,500 square feet. The enforcing agency may request plans for projects that include an unusual design. The electrical drawings shall include all of the following details:

- (a) Lighting layout.
- (b) Circuiting.
- (c) Switching.
- (d) Conductor and raceway sizes.
- (e) Wattage schedule.
- (f) Service location and riser diagram.
- (g) Load calculations.
- (h) A proposed method of construction that is drawn with symbols of a standard form.

All conductors are assumed to be copper unless otherwise stated in the plan. Specifications, when provided, shall also include the information listed in this rule. The selection of suitable disconnect and overcurrent devices to provide proper coordination and interrupting capacity for a wiring system is the responsibility of the designer. The enforcing agency, when approving electrical plans, does not assume responsibility for the design or for any deviations from any electrical drawings. The permit holder shall ensure that the plans and specifications approved by the enforcing agency, or a certified copy of the plans and specifications, where required, are available on the job for the use of the enforcing agency.

90-22(a). An architect or engineer shall prepare, or supervise the preparation of, all plans and specifications for new construction work or repair, expansion, addition, or modification work. The architect or engineer shall be licensed under 1980 PA 299, MCL §339.101 et seq. The plans and specifications shall bear the architect's or engineer's signature and seal.

Note: For exceptions, see 1980 PA 299, MCL §339.101 et seq.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30820 Representative on jobsite.

Rule 820. Sections 90-23 and 90-23(a) are added to the code to read as follows:

90-23. The enforcing agency reserves the right to require a representative of the permit holder to be on the job when an inspection is made.

90-23(a). A person who is licensed under 1956 PA 217, MCL §338.881 et seq., and who is employed by and represents the permit holder who is responsible for the electrical installation shall be present at all times when electrical construction is in progress.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30821

Source: 1997 AACs.

R 408.30822 Scheduling inspection.

Rule 822. Sections 90-25, 90-26, 90-27, and 90-29 are added to the code to read as follows:

90-25. An enforcing agency shall be given not less than 24 hours' notice to inspect electrical equipment. An enforcing agency shall perform the inspection within a reasonable period of time after the request for inspection is made.

90-26. Only the enforcing agency shall post a notice of inspection at, or remove a notice from, the jobsite. The enforcing agency shall maintain a record of all inspections.

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90-27. A person shall not conceal, or cause to be concealed, any conductors and equipment before the equipment is approved by the enforcing agency.

90-29. A person shall make a request for information in person or in writing.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30823

Source: 1997 AACS.

R 408.30824

Source: 1981 AACS.

R 408.30825 Rescinded.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; Rescinded 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30826 Violations.

Rule 826. Section 90-31 is added to the code to read as follows:

90-31. If it is found that any electrical equipment does not conform to the provisions of the code, then the enforcing agency shall notify, in writing, the person who installs, or who is responsible for installing, the electrical equipment, in accordance with section 12(3) of 1972 PA 230, MCL §125.1512(3), of the defect, misuse, or violation. Violations and penalties shall be as specified in section 23 of the act.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; 1991 MR 8, Eff. Aug. 17, 1991; 1999 MR 11, Eff. Dec. 1999.

R 408.30827 Service equipment.

Rule 827. Section 90-32 is added to the code to read as follows:

90-32. The enforcing agency shall approve service equipment installed, altered, or repaired before the load side of the meter is energized.

History: 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30830 Rescinded.

History: 1954 ACS 91, Eff. Nov. 12, 1977; 1979 AC; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30831 Number of service entrance sets.

Rule 831. Section 230-40 of the code is amended to read as follows:

230-40. Each service drop or lateral shall supply only 1 set of service entrance conductors.

Exception 1: Buildings that have more than 1 occupancy may have 1 set of service entrance conductors run to each occupancy or to a group of occupancies.

Exception 2: If 2 to 6 service disconnecting means in separate enclosures are grouped at 1 location and supply separate loads from 1 service drop or lateral, then 1 set of service entrance conductors may supply each or several service equipment enclosures.

Exception 3: A 2-family dwelling or a multifamily dwelling may have 1 set of service entrance conductors installed to supply the circuits covered by section 210-25 of the code.

Exception 4: One set of service entrance conductors connected to the supply side of the normal service disconnecting means may supply each or several systems covered by section 230-82(2) of the code.

History: 1979 ACS 8, Eff. Dec. 16, 1981; rescinded 1988 MR 10, Eff. Oct. 26, 1988; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30832

Source: 1997 AACS.

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R 408.30835 Conductors.

Rule 835. Section 300.3(b) of the code is amended and 300.3(b)(5) is added to the code to read as follows:

300-3(b). The enforcing agency shall ensure that all conductors of the same circuit and, where used, the grounded conductor and all equipment grounding conductors are contained within the same raceway, auxiliary gutter, cable tray, trench, cable, or cord, unless otherwise permitted in accordance with (1) through (5) of this section.

300-3(b)(5). The enforcing agency shall ensure that neutral and ungrounded circuit conductors for 2, 3, or 4-wire circuits originate at the same outlet or panel. The enforcing agency shall ensure that neutral or ungrounded conductors for circuits are not tapped or spliced from different locations in the wiring system.

History: 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30837 Grouping of disconnects.

Rule 837. Section 230-72(a) of the code is amended to read as follows:

230-72(a). The enforcing agency shall ensure that the 2 to 6 disconnects permitted in section 230-71 of the code are grouped. The enforcing agency shall ensure that each disconnect is marked to indicate the load served.

Exception 1: One of the 2 to 6 disconnecting means permitted in section 230-71 of the code, if used only for a water pump also intended to provide fire protection, may be located remote from the other disconnecting means.

Exception 2: Service disconnect or disconnects for separately metered outdoor electric space conditioning equipment for 1-and 2-family dwellings may be located immediately adjacent to the outdoor meter cabinet. The enforcing agency shall ensure that a permanent plaque or directory is installed at each service disconnect location denoting all other services, feeders, and branch circuits supplying a building or structure and the area served by each service, feeder, and branch circuit.

History: 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30838

Source: 1997 AACS.

R 408.30839 Rescinded.

History: 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30843 Wiring and equipment.

Rule 843 Section 517-61(a) of the code is amended to read as follows:

517-61(a). Except as permitted in section 517-160, each power circuit within, or partially within, an anesthetizing location as referred to in section 517-60 shall be isolated from any distribution system by the use of an isolated power system. Exception: An area in a health care facility which does not use flammable inhalation anesthetics and which is dedicated to brief, superficial procedures carried out under inhalation anesthesia or analgesia, such as dental operatories, clinics, and outpatient facilities.

History: 1985 MR 2, Eff. Mar. 7, 1985; 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1998 MR 11, Eff. Nov 30, 1998.

R 408.30865

Source: 1997 AACS.

R 408.30866 Types NM and NMC cables; uses not permitted.

Rule 866. Section 336-5(a) of the code is amended to read as follows:

336-5(a). The following types of NM, NMC, and nms cables are not permitted:

(a) As service entrance cable.

(b) In commercial garages that have hazardous(classified) locations as provided in section 511-3.

(c) In theaters and similar locations, except as provided in article 518, places of assembly.

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- (d) In motion picture studios.
- (e) In storage battery rooms.
- (f) In hoistways.
- (g) Embedded in poured cement, concrete, or aggregate.
- (h) In any hazardous (classified) location, except as permitted by section 501-4(b), exception; section 502-4(b), exception; and section 504-20.

History: 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1998 MR 11, Eff. Nov 30, 1998.

R 408.30867 Grounding of flexible metal conduit.

Rule 867. Section 350-14 of the code is amended to read as follows:

350-14. The permit holder shall not use flexible metal conduit as a grounding means. If an equipment bonding jumper is required around flexible metal conduit, then the permit holder shall install the jumper in accordance with section 250-102 of the code.

History: 1988 MR 10, Eff. Oct. 26, 1988; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30868 Ground of liquidtight flexible metal conduit.

Rule 868. Section 351-9 of the code is amended to read as follows:

351-9. The permit holder shall not use liquidtight flexible metal conduit as a grounding means. If an equipment bonding jumper is required around liquidtight flexible metal conduit, then the permit holder shall install the jumper in accordance with section 250-102 of the code.

History: 1988 MR 10, Eff. Oct. 26, 1988; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30869 Grounding conductors.

Rule 869. Section 250-118 of the code is amended to read as follows:

250-118. The enforcing agency shall ensure that the equipment grounding conductors run with or enclosing the circuit conductors is 1 or more, or a combination of, the following:

- (a) A copper or other corrosion-resistant conductor which is solid or stranded or insulated, covered, or bare and which is in the form of a wire or a busbar of any shape.
- (b) Rigid metal conduit.
- (c) Intermediate metal conduit.
- (d) Electrical metallic tubing.
- (e) Flexible metallic tubing which is terminated in fittings listed for grounding and which meets both of the following conditions:
 - (i) The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
 - (ii) The length of flexible metallic tubing is not more than 6 feet (1.83m).
- (f) Armor of type AC cable as provided in section 333-21 of the code.
- (g) A copper sheath that is mineral-insulated, metal-sheathed cable.
- (h) A metallic sheath or a combination metallic sheath and grounding conductor of type MC cable.
- (i) Cable trays as permitted by sections 318-3(c) and 318-7 of the code.
- (j) Cablebus framework as permitted by section 365-2(a) of the code.
- (k) Other electrically continuous metal raceways listed for grounding.

History: 1988 MR 10, Eff. Oct. 26, 1988; 1991 MR 8, Eff. Aug. 17, 1991; 1998 MR 11, Eff. Nov 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30870

Source: 1997 AACS.

R 408.30871

Source: 1995 AACS.

R 408.30872

Source: 1997 AACS.

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R 408.30873 Fire alarm monitoring.

Rule 873. Section 760-11 is added to the code to read as follows:

760-11. The enforcing agency shall ensure that all fire-protective circuits are electrically or electronically monitored for integrity so that any malfunction of the system, such as an electrical open, a ground fault, or any short circuit fault on the main power supply, signaling line, or alarm-initiating devices or fire safety control circuit, will indicate a visual and audible signal at the alarm panel when proper alarm operation would be prevented.

Exception 1: Interconnecting circuits of household fire-warning equipment that are wholly within a dwelling unit.

Exception 2: Fire safety control circuits that operate on loss of power to the auxiliary fire safety control relay are considered self-monitoring for integrity.

History: 1991 MR 8, Eff. Aug. 17, 1991; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998; 1999 MR 11, Eff. Dec. 7, 1999.

R 408.30880

Source: 1997 AACs.

PART 9. MECHANICAL CODE

R 408.30901—R 408.30998

Source: 1997 AACs.

PART 9A. MECHANICAL CODE

R 408.30901a Adoption by reference of international mechanical code.

Rule 901a. The provisions of the international mechanical code, 1996 edition, except for sections 103.2, 103.4, 106.5.1 to 107.1, 109.1 to 201.0 and except as noted in these rules govern the construction, alteration, relocation, demolition, use, and occupancy of buildings and structures. The international mechanical code, except for the sections noted and except as provided in these rules is adopted by reference in these rules and is referred to as "the code." The code is available for inspection at the Lansing office of the Michigan department of consumer and industry services, bureau of construction codes. The code may be purchased from the Building Officials and Code Administrators International, Incorporated, 4501 W. Flossmoor Road, Country Club Hills, Illinois 60477-5795, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these amendatory rules of \$36.00 each.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

AMENDMENTS AND ADDITIONS TO BASIC MECHANICAL CODE

R 408.30902a Licensing requirements.

Rule 902a. Section 101.2.2 of the code is amended to read as follows:

(1) A person shall possess a mechanical contractor's license in accordance with the provisions of Act No. 192 of the Public Acts of 1984, as amended, being §338.971 et seq. of the Michigan Compiled Laws, to install all mechanical equipment regulated by the code.

(2) A person shall possess a boiler installer's license issued by the Michigan department of consumer and industry services, boiler division, to install boilers.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30903a Alternative material, methods, and equipment.

Rule 903a. Section 105.2 of the code is amended to read as follows:

105.2. Approval for the use of new materials shall be in compliance with section 21 of Act No. 230 of the Public Acts of 1972, as amended, being §125.1521 et seq. of the Michigan Compiled Laws.

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History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30904a Inspector registration.

Rule 904a. Section 103.3 of the code is amended to read as follows:

103.3. The mechanical official shall possess a mechanical inspector's registration issued under Act No. 54 of the Public Acts of 1986, being §338.2301 et seq. of the Michigan Compiled Laws.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30905a Duties and powers of mechanical official.

Rule 905a. Section 104.2 of the code is amended to read as follows:

104.2. The state construction code commission shall have the power, as may be necessary in the interest of the public safety, health, and general welfare, to interpret and implement the provisions of the code by rule to secure the intent of the code and to designate requirements applicable because of local climatic or other conditions. Rules shall not have the effect of waiving working stresses or fire protection requirements specifically provided in the code or of violating approved engineering practices involving public safety. New rules shall be promulgated in compliance with section 4 of the act.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30906a Work permit; submitting plans and specifications to authority.

Rule 906a. Sections 106.1 and 106.2 of the code are amended to read as follows:

106.1. (1) Mechanical work shall not be commenced until a permit for the work has been issued by the code official. A mechanical permit is not transferable.

(2) To obtain a mechanical permit, an applicant shall be 1 of the following:

(a) A mechanical contractor who has obtained a license issued under Act No.

192 of the Public Acts of 1984, as amended, being §338.971 et seq. of the Michigan Compiled Laws.

(b) A homeowner who occupies or will occupy a single-family dwelling for which the permit is obtained and who will install the mechanical equipment as certified by the homeowner's affidavit as indicated on the permit application.

(c) A person who has obtained a boiler installer or repairer license under Act No. 290 of the Public Acts of 1965, as amended, being §408.751 et seq. of the Michigan Compiled Laws, shall secure a permit for the installation of a steam or hot water boiler which carries a pressure of not more than 15 psig and which is located in a private residence or in an apartment building that has a capacity of less than 6 families.

106.2. A person is not required to obtain a permit to perform mechanical work on any of the following items:

(a) A portable heating or gas appliance.

(b) Portable ventilation equipment.

(c) A portable cooling unit.

(d) A minor part that is replaced if the replacement does not affect equipment approval or make it unsafe.

(e) A portable evaporative cooler.

(f) Self-contained refrigeration equipment and a window-type air conditioner that is not more than 1.5 horsepower.

(g) A boiler or pressure vessel for which a permit is required by sections 17 and 18 of Act No. 290 of the Public Acts of 1965, as amended, being §§408.767 and 408.768 of the Michigan Compiled Laws.

(h) An oil burner that does not require connection to a flue, such as an oil stove and a heater equipped with a wick.

(i) A portable gas burner that has inputs of less than 30,000 Btu's per hour.

(j) Gas piping limited to 10 feet in length and not more than 6 fittings.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30907a Fees.

Rule 907a. Section 106.5 of the code is amended to read as follows:

106.5. A permit shall not be issued until the prescribed fees have been paid under section 22 of the act.

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History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30908a Inspections.

Rule 908a. Section 107.5.1 is added to the code to read as follows:

107.5.1. A mechanical official may revoke an inspection approval, upon notice to the permit holder, if the official determines that the equipment fails in any respect to conform to the requirements of the code or that the equipment is unsafe, dangerous, or a hazard to life or limb.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30909a Violations.

Rule 909a. Sections 108.2 and 108.4 of the code are amended to read as follows:

108.2. A mechanical official shall give written notice of any violation of the code to the violator. Within 7 days of the receipt of notice, and upon failure to remove the violations, the authority having jurisdiction may commence prosecution against the violator.

108.4. Prohibited acts and penalties shall be consistent with the acts and penalties specified in section 23 of the act.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30910a Stop work order.

Rule 910a. Section 108.5 of the code is amended and 108.5.1 is added to the code to read as follows:

108.5. Upon notice from the mechanical official that work on any building or structure is being performed contrary to the provisions of the code or in an unsafe and dangerous manner, the permit holder shall stop work in accordance with section 12 of the act.

108.5.1 A person who continues work that is being performed contrary to the code or in an unsafe and dangerous manner in or about the structure after having been served with a stop work order, except for work that he or she is directed to perform to remove a violation or unsafe condition, is subject to the penalty provisions under section 23 of the act.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30912a

Source: 1997 AACS.

R 408.30915a Scope of article; adoption by reference.

Rule 915a. Section 601.1 of the code is amended and 601.4 is added to the code to read as follows:

601.1. The provisions of this article shall govern the construction, installation, alteration, maintenance, and repair of duct systems. Duct systems shall be in compliance with the provisions of the code, the provisions of NFiPA 90A-1996 and NFiPA 90B-1996, the standards of the national fire protection association, and the provisions of air conditioning contractors of America (ACCA) manual D-1995, manual J-1986, manual N-1988, and manual Q-1990, standards that are adopted in these rules by reference. NFiPA 90A-1996 and NFiPA 90B-1996 may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, at a cost as of the time of adoption of these amendatory rules of \$22.25 and \$18.50, respectively.

ACCA manual D-1995, manual J-1986, manual N-1988, and manual Q-1990 may be purchased from the Air Conditioning Contractors of America, 1221 17th Street, N.W., Washington, DC 20036, at a cost as of the time of adoption of these amendatory rules of \$36.00, \$36.00, \$32.00, and \$62.00, respectively. The standards may also be purchased from the Michigan department of consumer and industry services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at the following costs as of the time of adoption of these amendatory rules, plus mailing costs:

NFiPA 90A-1996	\$22.25.
NFiPA 90B-1996	18.50.
ACCA manual D-1995	36.00.
ACCA manual J-1986	36.00.

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ACCA manual Q-1990	62.00.
ACCA manual N-1988	32.00.

The standards may be inspected at the Okemos office of the Michigan department of consumer and industry services.

601.4. Return air may not be recirculated from any of the following locations:

- (a) Kitchens.
- (b) Bathrooms.
- (c) Toilet rooms.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30916a Indoor locations.

Rule 916a. Section 303.5 of the code is amended to read as follows:

303.5. Indoor locations. Fuel-fired furnaces and boilers installed in closets and alcoves shall be listed for such installation. For purposes of this section, a closet or alcove shall be defined as a room or space that has a volume which is not less than 12 times the total volume of fuel-fired appliances other than boilers and not less than 16 times the total volume of boilers. Room volume shall be computed using the gross floor area and the actual ceiling height up to a maximum computational height of 8 feet (2438 mm).

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30917a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30918a Duct installation.

Rule 918a. Section 603.20.2 is added to the code to read as follows:

603.20.2. Floor registers or baseboard registers may not be located in any of the following rooms:

- (a) Toilet rooms.
- (b) Bathrooms.
- (c) Washrooms.
- (d) Laundry rooms.
- (e) Utility rooms.
- (f) Kitchens.
- (g) Basements.
- (h) Any adjacent room where the possibility of direct flooding may occur or where chemicals or other contaminants may enter the ducts.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30919a

Source: 1997 AACCS.

R 408.30920a Rescinded.

History: 1992 MR 10, Eff. Nov. 7, 1992; rescinded 1995 MR 8, Eff. Sept. 6, 1995.

R 408.30921a

Source: 1997 AACCS.

R 408.30922a Rescinded.

History: 1996 MR 9, Eff. October 6, 1996; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

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R 408.30923a Equipment installation.

Rule 923a. Sections 301.6 and 301.71 of the code are amended and section 301.15 is added to the code, to read as follows:

301.6. Conflicts. If conflicts between the code and the conditions of listing or the manufacturer's installation instructions occur, then the provisions of the code shall apply. Exception: If enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, then the conditions of the listing and the manufacturer's installation instructions shall apply. Section 301.7.1. All equipment shall have an electrical disconnect switch on, or immediately adjacent to, the equipment. 301.15. All residences shall have a permanently fixed heating system that provides a design indoor temperature throughout habitable areas of 70 degrees Fahrenheit (21 degrees Celsius) at a height of 3 feet from the floor.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30924a Hazardous location installation.

Rule 924a. Section 304.4.1 is added to the code to read as follows:

304.4.1. The discharge opening of warm air ducts that extends from any dwelling to its attached garage shall be not less than 6 feet and 6 inches (1,981 mm) from the floor of the garage. Outside air shall be supplied to the return air system through a duct that has a capacity which is equal to or more than the capacity of the garage warm air supply. The supply duct shall be provided with a back draft damper and a fire damper of approved design.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30925a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30926a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30927a

Source: 1995 AACS.

R 408.30928a Miscellaneous fuel-fired equipment.

Rule 928a. Sections 303.3 and 303.5 are added to the code to read as follows:

303.3.(Exception 5) A premanufactured fireplace that has an integral door or doors or a shutter or shutters which are constructed to close off the fire chamber from the living space and which are used in conjunction with outside combustion air that has a cross sectional inlet area that is not less than the smaller of either of the following:

(a) Fifty percent of the cross sectional flue area.

(b) Twenty-five square inches (161 cm).

303.5. Gas appliances shall not be located within 10 feet (3,048 mm) of the termination of a laundry chute, unless approved by the mechanical official. The inlet shall conduct the combustion air directly from outside the structure and connect to the inlet of the fire chamber assembly.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30929a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30930a Rescinded.

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History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30931a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30932a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30933a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30935a Ventilation requirements for commercial kitchens.

Rule 935a. Section 501.6 is added to the code to read as follows:

501.6. Ventilation for commercial kitchens shall be in compliance with the requirements of R 325.26001 to R 325.26008 of the Michigan Administrative Code, which are administered by the Michigan department of public health, and NFPA-96-1994, the standard of the national fire protection association, which is adopted in these rules by reference. The standard may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, at a cost as of the time of adoption of these amendatory rules of \$22.25 each, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864 at a cost as of the time of adoption of these amendatory rules of \$22.25 each, plus mailing costs. The standard may be inspected at the Okemos office of the Michigan department of consumer and industry services.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30936a Scope of article.

Rule 936a. Sections 1001.1 and 1001.2 of the code are amended to read as follows:

1001.1. Scope. This chapter shall govern the installation, alteration, and repair of boilers, water heaters, and pressure vessels.

Exceptions:

- (a) Pressure vessels used for unheated water supply.
- (b) Portable unfired pressure vessels and interstate commerce commission containers.
- (c) Containers for liquefied petroleum gases, bulk oxygen, and medical gas.
- (d) Unfired pressure vessels that have a volume of 5 cubic feet or less operating at pressures of not more than 250 psi (1724kPa) and located within occupancies of use groups B,F,H, M,R,S and U.
- (e) Pressure vessels used in refrigeration systems that are regulated by Chapter 11 of this code.
- (f) Pressure tanks used in conjunction with coaxial cables, telephone cables, power cables, and other similar humidity control systems.

1001.2. In addition to the other provisions of the code, this article shall govern the installation, alteration, and repair of water heaters and boilers. The installation of residential boilers shall be in compliance with the provisions of the code and R 408.4025 of the Michigan Administrative Code, which was promulgated under Act No. 290 of the Public Acts of 1965, as amended, being §408.751 et seq. of the Michigan Compiled Laws, and is administered by the Michigan department of consumer and industry services.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30937a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

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R 408.30938a

Source: 1997 AACs.

R 408.30940a Fuel gas piping systems.

Rule 940a. Section 1301.1 of the code is amended to read as follows:

1301.1. The installation, repair, and maintenance of fuel gas piping systems that are designed to operate at a maximum pressure of 125 psig shall be installed as specified by this article and in accordance with NFPA-54-1996, the standard of the national fire protection association, which is adopted in these rules by reference. The standard may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, at a cost as of the time of adoption of these amendatory rules of \$29.25 each, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these amendatory rules of \$29.25 each, plus mailing costs. The standard may be inspected at the Okemos office of the Michigan department of consumer and industry services.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30941a Materials for the installation, alteration, and repair of fuel gas piping.

Rule 941a. Section M-803.1 of the code is amended to read as follows:

M-803.1. Materials for the installation, alteration, and repair of fuel gas piping shall be in compliance with the applicable standards listed in appendix A. Piping materials not covered in this section may be used when approved pursuant to section M-107.0.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995.

R 408.30942a

Source: 1997 AACs.

R 408.30943a

Source: 1997 AACs.

R 408.30944a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30946a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30948a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30949a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30951a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30952a

Source: 1997 AACs.

R 408.30953a Rescinded.

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History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30954a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30955a

Source: 1997 AACS.

R 408.30956a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30958a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30960a

Source: 1997 AACS.

R 408.30962a Rescinded.

History: 1996 MR 9, Eff. October 6, 1996; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30963a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30964a

Source: 1997 AACS.

R 408.30965a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30966a

Source: 1997 AACS.

R 408.30967a

Source: 1997 AACS.

R 408.30968a

Source: 1997 AACS.

R 408.30970a

Source: 1997 AACS.

R 408.30971a

Source: 1997 AACS.

R 408.30972a

Source: 1997 AACS.

R 408.30975a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995;

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rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30977a

Source: 1997 AACS.

R 408.30982a

Source: 1997 AACS.

R 408.30983a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30984a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30987a Rescinded.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1995 MR 8, Eff. Sept. 6, 1995; rescinded 1998 MR 11, Eff. Nov. 30, 1998.

R 408.30989a

Source: 1997 AACS.

R 408.30992a

Source: 1997 AACS.

R 408.30995a Automatic sprinkler systems generally.

Rule 995a. Sections 1700, 1700.1, and 1700.2 are added to the code to read as follows:

1700.0. Automatic sprinkler systems; fire suppression systems.

1700.1. The provisions of this article provide the minimum requirements for the design and installation of automatic sprinkler systems in all occupancies, except for 1- and 2-family dwellings.

1700.2. Installations shall be in compliance with the provisions of the mechanical code. Fire suppression systems shall be in compliance with the provisions of the building code and shall be installed in accordance with the code and NFIPA-13-1996, NFIPA-13D-1996, and NFIPA-13R-1996, installation of sprinkler systems, installation of sprinkler systems in 1- and 2-family dwellings and manufactured homes, and installation of sprinkler systems in residential occupancies up to 4 stories in height, standards of the national fire protection association, which are adopted in these rules by reference.

The standards may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, at a cost as of the time of adoption of these amendatory rules of \$31.50, \$22.25, and \$22.25, respectively, or from the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these amendatory rules of \$31.50, \$22.25, and \$22.25, respectively, plus mailing costs. The standards may be inspected at the Lansing office of the Michigan department of consumer and industry services.

History: 1989 MR 8, Eff. Aug. 23, 1989; 1992 MR 10, Eff. Nov. 7, 1992; 1995 MR 8, Eff. Sept. 6, 1995; 1998 MR 11, Eff. Nov. 30, 1998.

PART 10. ENERGY CONSERVATION IN NEW BUILDING DESIGN

R 408.31001 - 408.31055 Rescinded.

History: 1954 ACS 90, Eff. June 22, 1977; 1979 AC; 1979 ACS 8, Eff. Dec. 16, 1981; rescinded 1999 MR

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

BUREAU OF CONSTRUCTION CODES

GENERAL RULES

PART 10. MICHIGAN UNIFORM ENERGY CODE

R 408.31061 Definitions; A to C.

Rule 1061. As used in these rules:

- (a) "Addition" means new construction which is performed on an existing building and which increases the outside dimensions of the building.
- (b) "Air leakage" means a measure of the airtightness of a building shell caused by the pressure differential across the building envelope and the resulting airflow rate through the envelope.
- (c) "Alteration" means an enhancement, upgrading, or substantial change or modification, other than an addition or repair, to an existing structure.
- (d) "Annual fuel utilization efficiency" or "AFUE" means the efficiency rating of the heating plant model determined on average usage conditions as set out in the United States department of energy test procedures. It does not include electrical energy usage for gas or oil-fired furnace or boiler usage.
- (e) "Band joist" means the peripheral edges of framed floors.
- (f) "Basement" means any floor level below the first story in a building, except that a floor level in a building that has only 1 floor level shall be classified as a basement, unless the floor level qualifies as a story above grade.
- (g) "Basement wall" means the opaque portion of a wall which encloses 1 side of a basement and which is partially or totally below grade.
- (h) "British thermal units" or "Btu" means approximately the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit at 39.2 degrees Fahrenheit and at 1 atmosphere of pressure.
- (i) "Building" means any structure which is occupied or intended to be occupied and which is for supporting or sheltering any occupancy. Portions of a building that are completely separated from other portions by fire separation walls are considered separate buildings.
- (j) "Building envelope" means the elements of a building that enclose conditioned spaces through which thermal energy may be transferred to or from the exterior or to or from spaces exempted by R 408.31070 (6).
- (k) "Building official" means the person authorized under section 2 of Act No. 54 of the Public Acts of 1986, as amended, being §338.2302 of the Michigan Compiled Laws, to act on behalf of the responsible government agency for the administration of the applicable building code.
- (l) "Closed construction" means any building, building component, assembly, or system manufactured in a way that it cannot be inspected before installation at the building site without disassembly, damage, or destruction.
- (m) "Coefficient of performance" or "COP" means the ratio of useful energy produced by a refrigeration system or heat pump divided by the energy consumed. The higher the COP value, the more efficient the heat pump. A COP of 3, for example, means that three times as much heating energy was delivered as it took to power the heat pump.
- (n) "Conditioned floor area" means the horizontal projection of the portion of interior space which is contained within exterior walls and which is conditioned directly or indirectly by an energy-using system.
- (o) "Conditioned space" means space within a building that is provided with a positive heat supply.
- (p) "Cost effective" means that the economic benefits of the requirements of these rules will exceed the economic costs of the requirements of these rules based on a multiyear analysis. The analysis shall be in compliance with all of the following provisions:
 - (i) Take into consideration the perspective of a typical first-time new home buyer.
 - (ii) Consider benefits and costs over a 7-year time period.
 - (iii) Not assume fuel price increases in excess of the assumed general rate of inflation.
 - (iv) Assure that the buyer of a home who qualifies to purchase the home before the addition of the energy efficiency standards would still qualify to purchase the same home after the additional cost of the energy-saving construction features.
 - (v) Assure that the cost of principal, interest, taxes, insurance, and utilities will not be greater after the

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inclusion of the cost of the additional energy-saving construction features required by this part as opposed to the provisions of R 408.31001 to R 408.31055.

(q) "Crawl space" means an area below the floor nearest grade that is supported by foundation walls and that does not qualify as a basement or story above grade due to restrictive height conditions.

(r) "Crawl space wall" means the opaque portion of a wall which encloses a crawl space and which is partially or totally below grade.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31062 Definitions; E to G.

Rule 1062. As used in these rules:

(a) "Energy" means the capacity for doing work and takes a number of forms that may be transformed from one into another, such as thermal (heat), mechanical (work), electrical, and chemical energy in customary units measured in kilowatt-hours (kWh) or British thermal units (Btu).

(b) "Energy efficiency ratio" or "EER" means the ratio of net cooling capacity in Btu per hour to total rate of electric input, in watts, under designed operating conditions.

(c) "Existing residential building" means a residential building erected before the effective date of R 408.31061, this rule, and R 408.31063 to R 408.31099, a residential building for which a valid building permit or certificate of occupancy has been issued, or a residential building for which lawful construction commenced before the effective date of R 408.31061, this rule, and R 408.31063 to R 408.31099.

(d) "Existing residential structure" means a residential structure erected before the effective date of R 408.31061, this rule, and R 408.31063 to R 408.31099, a residential structure for which a valid building permit or certificate of occupancy has been issued, or a residential structure for which lawful construction commenced before the effective date of R 408.31061, this rule, and R 408.31063 to R 408.31099.

(e) "Fenestration" means all envelope component assemblies, including doors, which are in a building wall or ceiling, which are used for light transmittance, ingress, or egress, and which enclose conditioned space.

(f) "Finished lower level" means a basement, or portion of a basement that is an enclosed area, which is suitable for year-round use, including walls, floors, and ceilings, and which meets the requirements of the applicable building code for its intended use.

(g) "Floors over unconditioned spaces" means a conditioned floor area that is over unconditioned space, outdoor air, or space exempted by R 408.31070 (6) (a) and (b).

(h) "Foundation wall" means a wall below the floor nearest grade that serves as a support for a wall or other structural part of a building.

(i) "Grade plane" means a reference plane representing the average of finished ground level adjoining the building at all exterior walls. If the finished ground level slopes away from the exterior walls, then the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet from the building, between the building and a point 6 feet from the building.

(j) "Gross area of exterior walls" means both of the following:

(i) The normal projection of the building envelope insulated wall area that bounds interior space which is conditioned by an energy-using system, including window, door, and opaque wall area.

(ii) All opaque insulated wall areas which are exposed to outdoor air, unconditioned spaces, or spaces exempted by R 408.31070 (6) (a) and (b) and which enclose a heated or mechanically cooled space including interstitial area between 2 heated or mechanically cooled spaces, including any of the following areas:

(A) Between-floor spandrels.

(B) Peripheral edges of floors.

(C) Window areas, including sash, and door areas.

(k) "Ground source heat pump" means a mechanical device which is used for heating and cooling and which operates by using the earth as a heat source and heat sink. The system circulates fluid through a heat exchanger to extract or reject heat from a ground or water source.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31063 Definitions; H to M.

Rule 1063. As used in these rules:

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- (a) "Heated slab" means slab-on-grade construction in which the heating elements or hot air distribution system is in contact with, or placed within, the slab or the subgrade.
 - (b) "Heated space" means space within a building that is provided with a positive heat supply. Finished lower level space within a basement that has registers or heating devices designed to supply heat to the space is heated space.
 - (c) "Heating degree day" or "HDD" means a unit of temperature and time that may be used to estimate fuel consumption, specify fuel consumption, and specify nominal heating load of a building in winter. A heating degree day accrues for every degree that mean outdoor temperature for a 24-hour period falls below 65 degrees Fahrenheit.
 - (d) "Heating seasonal performance factor" or "HSPF" means the total heating output of a heat pump during its normal annual usage period for heating, in Btu, divided by the total electric energy input during the same period, in watt hours, as determined by 10 C.F.R. part 430, subpart B, test procedure.
 - (e) "HVAC" means heating, ventilating, air conditioning.
 - (f) "HVAC system equipment" means equipment that provides, in 1 single package or more (split system) factory-assembled packages, a means for air circulation, air cleaning, or air cooling with controlled temperature. The cooling function may be either electrically operated or heat operated. The refrigerant condenser may be air, water, or evaporatively cooled. If the equipment is provided in more than 1 package, then the separate packages shall be designed by the manufacturer to be used together. The equipment may provide the heating function as a heat pump or through the use of electric or fossil fuel-fired elements.
 - (g) "Infiltration" means the uncontrolled inward air leakage which occurs through cracks and interstices in any building element and around windows and doors of a building and which is caused by the pressure effects of wind or temperature differences, or both, or appliance-induced pressures.
 - (h) "Insulation component" means insulating materials or combinations of insulating materials which are used in the course of construction as insulation, which are certified to meet ASTM C-578 standard, and which are in compliance with R 408.31071.
 - (i) "Manufactured building" means any closed construction building, except for a mobile home, that is made or assembled in manufacturing facilities on or off the building site. The term also means any open construction building that is made away from the building site for installation or assembly and installation on the building site.
 - (j) "Mobile home" means a factory-assembled, movable dwelling which is designed and constructed to meet United States housing and urban development department (HUD) standards and to be towed on its own chassis that is comprised of the frame and wheels and which is distinguishable from other types of dwellings in that the standards to which it is built include provisions for its mobility on a chassis as a vehicle.
- History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31064 Definitions; O to R.

Rule 1064. As used in these rules:

- (a) "Occupied" means a building in which a person resides or which is intended, arranged, or designated to be occupied.
- (b) "Opaque area" means any exposed area of a building envelope that encloses conditioned space, except openings for windows, skylights, doors, and building service systems.
- (c) "Opaque exterior building envelope" means all exposed areas of a building envelope that enclose conditioned space, except openings for windows, skylights, doors, and building service systems.
- (d) "Open construction" means any building, building component, assembly, or system that is manufactured in a way that it can readily be inspected at the building site without disassembly, damage, or destruction.
- (e) "Openings" means fenestration areas that penetrate and comprise part of the gross area of exterior walls (jamb size).
- (f) "Overall thermal transmittance" or "Uo" means the area-weighted average of the thermal transmittance values of all material, including framing and fenestration, as well as the component assemblies, such as air film, insulation, drywall, framing, and glazing, that make up the building envelope.
- (g) "Permit" means an official document or certificate which is issued by the governmental subdivision and which authorizes performance of a specified activity.
- (h) "Positive heat supply" means either of the following:

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- (i) Heat directly supplied to a space by design, such as a supply register, radiator, or heating element.
 - (ii) Heat indirectly supplied to a space by convection from the energy-consuming systems if the energy-consuming systems are not insulated and continually maintain air temperature within the space of 50 degrees Fahrenheit or higher during normal operation.
 - (i) "Prescriptive requirements" means specified values or rules representing the requirements that must be met to achieve compliance with R 408.31073, R 408.31074 to R 408.31081, R 408.31082 and 408.31083.
 - (j) "Renewable energy sources" mean sources of energy, excluding minerals, derived from incoming solar radiation, including any of the following:
 - (i) Natural day light and photosynthetic processes.
 - (ii) Phenomena resulting from natural day light and photosynthetic processes, including wind, waves, and tides and lake or pond thermal differences.
 - (iii) The internal heat of the earth, including nocturnal thermal exchanges.
 - (k) "Repair" means the act or process of restoring to original soundness, including, but not limited to, any of the following:
 - (i) Redecorating.
 - (ii) Refinishing.
 - (iii) Nonstructural repairs.
 - (iv) Maintenance repairs or replacement of existing fixtures, systems, or equipment.
 - (l) "Residential buildings" means any of the following:
 - (i) Detached 1 and 2-family dwellings.
 - (ii) Other residential buildings that are 3 stories or less in height.
 - (iii) A building or structure which is incidental to the use of the main residential building and which is located within the apartment complex or subdivision.
 - (m) "Roof/ceiling assembly" means a roof/ceiling assembly and all components of the roof/ceiling envelope through which heat flows and creates a building transmission heat loss or gain where the assembly is exposed to outdoor air and encloses a heated or mechanically cooled space. The gross area of a roof/ceiling assembly consists of the total interior surface of the assembly, including skylights exposed to the heated or mechanically cooled space.
 - (n) "R-value" means the measure of thermal resistance, that is, how well a material or series of materials resists the flow of heat. R-value is the reciprocal of thermal transmittance or ($R=1/U$).
- History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31065 Definitions; S to T.

Rule 1065. As used in these rules:

- (a) "Sash crack" means the sum of all weather-stripped perimeters of window sashes, skylights, and doors. The sum shall be based on overall dimensions of the weatherstripped perimeters of window sashes, skylights, and doors, expressed in feet. If a portion of one sash perimeter overlaps a portion of another sash perimeter, then the length of the overlapping portions is counted once.
- (b) "Seasonal energy efficiency ratio" or "SEER" means the total cooling output of an air conditioner during its normal annual usage period for cooling, in Btu/h, divided by the total electric energy input during the same period, in watt-hours, as determined by 10 C.F.R. part 430, subpart B, test procedure.
- (c) "Slab-on-grade floor insulation" means insulation around the perimeter of the floor slab or its supporting foundation when the top edge of the floor perimeter slab is above the finished grade or 12 inches or less below the finished grade.
- (d) "Story" means the portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.
- (e) "Story above grade" means any story that has its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade if the finished surface of the floor above the basement is any of the following:
 - (i) More than 6 feet above grade plane.
 - (ii) More than 6 feet above the finished ground level for more than 50% of the total building perimeter.
 - (iii) More than 12 feet above the finished ground level at any point.
- (f) "Structure" means that which is built or constructed or a portion of something that is built or constructed.

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(g) "System" means a combination of central or terminal equipment or components, or controls, accessories, interconnecting means, and terminal devices, by which energy is transformed so as to perform a specific function, such as HVAC.

(h) "Thermal resistance" or "R" means a measure of the ability to retard the flow of heat. The R-value is the reciprocal of thermal transmittance or $R=1/U$.

(i) "Thermal transmittance" or "U" means time rate of heat flow through a body or assembly that is located in 2 different environments, expressed in Btu per (hour)(square foot)(degree Fahrenheit). The U-value applies to all of the following:

(i) The combination of different materials used in series along the heat flow path.

(ii) Single materials that comprise a building section.

(iii) Cavity air spaces.

(iv) Surface air films on both sides.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31066 Definitions; U to Z.

Rule 1066. As used in these rules:

(a) "Unconditioned space" means space within a building that is not conditioned space.

(b) "Walls" means the portions of the building envelope that are vertical or tilted at an angle of 30 degrees or less from the vertical plane.

(c) "Warm air furnace" means a self-contained, indirect-fired or electrically heated furnace that supplies heated air through ducts to spaces that require it.

(d) "Zone 1" means the following counties:

(i) Allegan.

(ii) Barry.

(iii) Berrien.

(iv) Branch.

(v) Calhoun.

(vi) Cass.

(vii) Clinton.

(viii) Eaton.

(ix) Genessee.

(x) Gratiot.

(xi) Hillsdale.

(xii) Huron.

(xiii) Ingham.

(xiv) Ionia.

(xv) Jackson.

(xvi) Kalamazoo.

(xvii) Kent.

(xviii) Lapeer.

(xix) Lenawee.

(xx) Livingston.

(xxi) Macomb.

(xxii) Monroe.

(xxiii) Montcalm.

(xxiv) Muskegon.

(xxv) Oakland.

(xxvi) Ottawa.

(xxvii) Saginaw.

(xxviii) Sanilac.

(xxix) Shiawassee.

(xxx) St. Clair.

(xxxi) St. Joseph.

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- (xxxii) Tuscola.
- (xxxiii) Van Buren.
- (xxxiv) Washtenaw.
- (xxxv) Wayne.
- (e) “Zone 2” means the following counties:
 - (i) Alcona.
 - (ii) Alpena.
 - (iii) Antrim.
 - (iv) Arenac.
 - (v) Bay.
 - (vi) Benzie.
 - (vii) Charlevoix.
 - (viii) Cheboygan.
 - (ix) Clare.
 - (x) Crawford.
 - (xi) Emmet.
 - (xii) Gladwin.
 - (xiii) Grand Traverse.
 - (xiv) Iosco.
 - (xv) Isabella.
 - (xvi) Kalkaska.
 - (xvii) Lake.
 - (xviii) Leelanau.
 - (xix) Manistee.
 - (xx) Mason.
 - (xxi) Mecosta.
 - (xxii) Midland.
 - (xxiii) Missaukee.
 - (xxiv) Montmorency.
 - (xxv) Newaygo.
 - (xxvi) Oceana.
 - (xxvii) Ogemaw.
 - (xxviii) Osceola.
 - (xxix) Oscoda.
 - (xxx) Otsego.
 - (xxxi) Presque Isle.
 - (xxxii) Roscommon.
 - (xxxiii) Wexford.
- (f) “Zone 3” means the following counties:
 - (i) Alger.
 - (ii) Baraga.
 - (iii) Chippewa.
 - (iv) Delta.
 - (v) Dickinson.
 - (vi) Gogebic.
 - (vii) Houghton.
 - (viii) Iron.
 - (ix) Keweenaw.
 - (x) Luce.
 - (xi) Mackinac.
 - (xii) Marquette.
 - (xiii) Menominee.
 - (xiv) Ontonagon.

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(xv) Schoolcraft.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31070 Code title, intent, compliance, and exemption; adoption of standards by reference.

Rule 1070. (1) These rules shall be known as the Michigan uniform energy code.

(2) The intent of the Michigan uniform energy code, referred to as “the code,” is to provide cost-effective minimum energy conservation requirements when designing or building new residential buildings or structures. The code is not intended to be, nor should it be construed as, the optimization of energy-conserving practices. The code provides flexibility to permit the use of innovative approaches and techniques to achieve the effective utilization of energy.

(3) Residential buildings shall be designed and constructed to comply with either the requirements of R 408.31073, R 408.31074 to R 408.31081, R 408.31082 and R 408.31083 or the requirements of R 408.31084, R 408.31085 and R 408.31086.

(4) Residential buildings that have more than 1 occupancy shall conform each portion of the building to the requirements for the occupancy within that portion.

If minor accessory uses do not occupy more than 10% of the area of any floor of a building, then the major use shall be considered the building occupancy.

(5) Compliance with the code shall be achieved by 1 of the methods specified in this subrule. The decision of which method to use to achieve compliance with the code shall be the sole discretion of the builder and shall be accepted by the building official. The methods are as follows:

(a) A prescriptive approach for insulating components as required in R 408.31073, R 408.31074 to R 408.31081, R 408.31082 and R 408.31083.

(b) A systems approach for the entire building performance as required in R 408.31084, R 408.31085, and R 408.31086.

(6) All of the following buildings are exempt from the code:

(a) A residential building or portion of a residential building that has an intended maximum rate of energy usage less than 3.4 Btu/h per square foot of floor area for all purposes.

(b) A residential building or portion of a residential building that is not heated or mechanically cooled.

(c) An existing building.

(d) An alteration of any existing residential building or structure or portion of a residential building.

(e) An addition to any existing residential building or structure.

(f) An existing residential building moved into or within the jurisdiction.

A manufactured building that is shipped for initial installation or initial assembly and installation on a building site shall not be considered a moved structure.

(7) A building, other than a residential building, shall be designed and constructed to comply with the requirements of ASHRAE 90A-1980 and 90B-1975.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31071 Materials and equipment; identification; insulation installation, maintenance, and labeling; fenestration rating, certification, and labeling.

Rule 1071. (1) As required by the code, materials and equipment shall be identified to show compliance with the code.

(2) Either each piece of building envelope insulation that is 12 inches or more in width shall have a manufacturer-applied thermal resistance (r) identification mark or the insulation installer shall provide a signed and dated certification for the insulation installed in each element of the building envelope. The certification shall list the type of insulation, the manufacturer, and the R-value. For blown-in or sprayed insulation, the installer shall also provide all of the following information:

(a) the initial installed thickness.

(b) the settled thickness.

(c) the coverage area.

(d) the number of bags installed.

The installer shall provide the certification to the building official.

(3) The amount of air leakage of premanufactured fenestration products, including windows, doors, and

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skylights in locations separating outdoor ambient conditions or exempted portions of the building from interior spaces that are heated or mechanically cooled, shall be labeled or certified by the manufacturer not to be more than .37 cubic feet per minute (CFM) of air leakage per lineal foot of sash crack perimeter at an air pressure of 1.56 pounds per square foot (PSF) (25 MPH) using ASTM-E283 procedures. Certified or labeled values shall be accepted in determining compliance with the building envelope requirements of the code.

Custom-installed windows and doors that are not premanufactured are exempt from product rating requirements for air leakage. The installation of custom fenestration products shall comply with R 408.31082.

(4) Roof/ceiling, floor, and wall cavity insulation shall be installed so that the manufacturer's R-value identification mark can be readily inspected.

For roof/ceiling insulation, the thickness of the insulation that is either blown in or sprayed by thickness shall be identified by markers that are labeled in inches. The markers shall be installed in not less than 5 locations in each separate attic area. Four markers shall be evenly spaced around the perimeter of the space and 1 shall be located near the access opening. The markers shall be affixed to the truss or joist/rafter framing before application of the loose-fill insulation and shall be marked with the minimum initial installed thickness recommended by the loose-fill manufacturer and also, when given on the manufacturer's label, shall mark the minimum settled thickness. The markers shall be installed to accurately indicate the depth of installed insulation.

(5) An installer shall install the loose-fill insulation at a uniform depth throughout the open area of the attic. The depth shall equal or exceed the minimum initial installed thickness shown on the markers. The minimum bags per 1,000 square feet recommended by the manufacturer shall be installed.

(6) All needed maintenance actions that must be performed on a regular basis shall be clearly stated and incorporated on a readily accessible label.

The label shall be easily accessed and indicate, by title or publication number, the manual for the particular model and type of product that provides operation and maintenance requirements and instructions. Maintenance instructions shall be provided for any equipment that requires preventive maintenance for efficient operation.

(7) R-values of fenestration products, including windows, doors, and skylights, shall be determined from the center of the unit or glass by an accredited independent laboratory and labeled or shall be certified by the manufacturer or fabricator. Labeled or certified values shall be accepted for purposes of determining compliance with the building envelope requirements of the code.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31072 Alternate materials, method of construction, design, or insulating systems.

Rule 1072. The code is not intended to preclude the use of any material, method of construction, design, or insulating system not specifically mentioned in the code if the material, method of construction, design, or insulating system has been approved by the building official as meeting the intent of the code.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31073 Residential building design by prescriptive approach; building envelope requirements.

Rule 1073. (1) This rule applies to residential buildings that are to be heated or mechanically cooled and are designed or constructed in accordance with this rule, R 408.31074 to R 408.31081, R 408.31082 and 408.31083.

(2) The requirements in R 408.31074 to R 408.31081 are not intended to be limiting. Methods of construction that combine insulating materials may be used if documentation is submitted to the building official indicating the thermal resistance value (r) of the total insulation materials. The documentation shall be in accordance with accepted engineering practice. Documentation submitted by a person licensed under article 24 of Act No. 299 of the Public Acts of 1980, as amended, being §339.2401 et seq. of the Michigan Compiled Laws, need not be prepared, sealed, or submitted by an architect, professional engineer, or other consultant.

(3) The design shall not create conditions of accelerated deterioration from moisture condensation. In all

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frame walls, floors, and ceilings not ventilated to allow moisture to escape, an approved vapor retarder that has a maximum perm rating of 1.0 shall be used on the warm-in-winter side of the thermal insulation.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31074 Building component criteria; walls.

Rule 1074. (1) The thermal resistance value (r) of the insulation for the exterior walls and band joists comprising the building envelope above the foundation wall shall not be less than the value specified in table 1074, as follows:

(a) R13 for zone 1.

(b) R15 for zone 2.

(c) R19 for zone 3.

(2) Table 1074 reads as follows:

TABLE 1074

**PRESCRIPTIVE COMPLIANCE APPROACH
BUILDING ENVELOPE INSULATION CRITERIA**

Building Component	Zone 1	Zone 2	Zone 3
R 408.31074 Walls	R13	R15	R19
R 408.31075 Fenestration/openings			
Up to and including 15% gross exterior wall area	R1.9	R1.9	R1.9
Over 15% and including 20% gross exterior wall area	R2.5	R2.5	R2.5
Over 20% gross exterior wall area opening	Refer to building envelope allowance trade-off options (R408.31083)		
R 408.31076 Roof/ceiling			
Skylights follow fenestration requirements for R values and are limited to 10% of gross roof/ceiling area	R30	R38	R38
R 408.31077 Floors over unconditioned spaces (including outdoor overhangs)	R21	R30	R30
R 408.31078 Slab-on-grade floors			
Unheated slabs	R5	R5	R5
Heated slabs	R10	R10	R10
R 408.31079 Crawl space walls	R5	R5	R5
R 408.31080 Finished lower level walls	R5	R5	R5
R 408.31081 Exposed basement Walls (More than 7% of the gross exterior wall area)	R5	R5	R5

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History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31075 Building component criteria; fenestration.

Rule 1075. All of the following provisions apply to fenestration:

- (1) Openings, including doors, in the exterior building envelope up to and including 15% of gross exterior wall area shall have a thermal resistance R-value that is not less than the value specified in table 1074, being R1.9 for zone 1, zone 2, and zone 3.
- (2) If openings, including doors, in the exterior building envelope exceed 15% up to and including 20% of gross exterior wall area, they shall have a thermal resistance R-value that is not less than the value specified in table 1074, being R2.5 for zone 1, zone 2, and zone 3.
- (3) If openings, including doors, in the exterior building envelope exceed 20% of the gross area of exterior walls, then the requirements of R 408.31083 shall apply.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31076 Building component criteria; roof/ceiling.

Rule 1076. The thermal resistance value (r) of the insulation for the roof/ceiling assembly comprising the building envelope shall not be less than the value specified in table 1074, as follows:

- (a) R30 for zone 1.
- (b) R38 for zone 2 and zone 3.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31077 Building component criteria; floors over unconditioned space.

Rule 1077. The thermal resistance value (r) of the insulation for floors over unconditioned spaces comprising the building envelope, including outdoor overhangs, shall not be less than the value specified in table 1074, as follows:

- (a) R21 for zone 1.
- (b) R30 for zone 2 and zone 3.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31078 Building component criteria; slab-on-grade floors.

Rule 1078. All of the following provisions apply to slab-on-grade floors:

- (a) The thermal resistance value (r) of the insulation around the perimeter of the floor comprising the building envelope shall be not less than the value specified in table 1074, as follows:
 - (i) R5 for unheated slabs for zone 1, zone 2, and zone 3.
 - (ii) R10 for heated slabs for zone 1, zone 2, and zone 3.
- (b) Insulation shall be placed around the perimeter of the floor slab or its supporting foundation when the top edge of the floor perimeter slab is above the finished grade or 12 inches or less below the finished grade.
- (c) The insulation shall extend downward from the elevation of the top of the slab for a minimum distance of 24 inches or downward to at least the bottom of the slab and then horizontally to the interior or exterior for a minimum total distance of 24 inches.
- (d) The insulation shall be of an approved type.
- (e) Horizontal insulation extending outside of the foundation shall be covered by a protective material or by soil that is a minimum of 10 inches thick.
- (f) The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree angle away from the exterior wall.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31079 Building component criteria; crawl space walls.

Rule 1079. The exterior walls of crawl spaces comprising the building envelope and below uninsulated floors shall have insulation that has a thermal resistance value (r) of not less than R5 for zone 1, zone 2, and zone 3, as specified in table 1074. All of the following provisions apply to crawl space walls:

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- (a) The crawl space wall insulation shall extend vertically from the top of the foundation wall to the outside finished ground level.
 - (b) The insulation shall also extend not less than 24 inches below outside finished ground level or a combined vertical and horizontal distance of 24 inches from the outside finished ground level.
 - (c) Horizontal insulation extending outside of the foundation shall be covered by a protective material or by soil that is a minimum of 10 inches thick.
 - (d) The insulated crawl space walls are included as part of the gross area of exterior walls from the top of the foundation wall to the outside finished ground level.
 - (e) When crawl spaces below uninsulated floors are ventilated during the summer, the vent area shall be provided at a ratio of 1 square foot per 1,500 square feet of crawl space floor area. The ground surface (floor) within the crawl space shall be covered with a material that has a rating of 1.0 perm or less.
 - (f) An insulated crawl space that comprises the building envelope and is a heated space through the existence of a positive heat supply is not required to be ventilated during the heating season.
- History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31080 Building component criteria; finished lower level walls.

Rule 1080. The exterior walls of heated finished lower levels shall have insulation that has a thermal resistance value (r) of not less than R5 for zone 1, zone 2, and zone 3, as specified in table 1074. Both of the following provisions apply to finished lower level walls:

- (a) The wall insulation shall extend vertically from the top of the foundation wall to floor of the finished lower level.
- (b) Insulated lower level walls, including the below-grade portion, are included as part of the gross area of exterior walls, if the windows and doors meet the fenestration and door requirements in R 408.31071(3) and R 408.31075.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31081 Building component criteria; exposed basement walls.

Rule 1081. The exterior basement walls comprising the building envelope shall not have an uninsulated exposed area above finished grade that is more than 7% of the gross area of exterior walls. All of the following provisions apply to exposed basement walls that are exposed more than the 7% limit:

- (a) Basement wall areas that are exposed more than the 7% limit shall be insulated with insulation that has a minimum thermal resistance value (r) of R5 as specified in table 1074 for zone 1, zone 2, and zone 3, until the uninsulated exposed area has been reduced to 7% or less of the gross area of exterior walls.
- (b) The method or area of insulating shall be at the discretion of the builder.
- (c) The insulated area of the basement walls are included as part of the gross area of exterior walls.
- (d) If insulation is placed on the exterior of a foundation supporting a masonry veneer exterior, then the horizontal foundation surface supporting the veneer is not required to be insulated to satisfy the exposed basement wall criteria.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31082 Air leakage.

Rule 1082. (1) This rule applies to locations that separate outdoor ambient conditions or exempted portions of the building from interior spaces that are heated or mechanically cooled. This rule is not applicable to the separation of interior conditioned spaces from each other.

(2) Exterior joints in the building envelope that are sources of air leakage shall be caulked, gasketed, weather-stripped, or otherwise sealed.

The areas may include joints around window and door frames, between wall and foundation, between wall panels, or penetrations and utility services through walls, floors, and roof/ceiling assemblies that comprise the building envelope.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31083 Trade-off options.

Rule 1083. (1) A proposed building which is designed under R 408.31073, R 408.31074 to R 408.31081,

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R408.31082, and this rule and which exceeds 20% fenestration and door openings of the gross area of exterior walls shall be in compliance with one of the following trade-off options:

- (a) High-efficiency HVAC equipment trade-off option, subrule (2) of this rule.
- (b) High-efficiency windows and doors trade-off option, subrule (3) of this rule.
- (c) Roof/ceiling and wall trade-off option, subrule (4) of this rule.
- (d) Basement insulation trade-off option, subrule (5) of this rule.
- (e) Air leakage control trade-off option, subrule (6) of this rule.

(2) This subrule applies to equipment and mechanical component performance for heating, ventilating, and air-conditioning systems. All of the following provisions apply to the high-efficiency HVAC equipment trade-off option:

(a) With respect to warm air furnaces and combination warm air furnaces/ air-conditioning units, gas and oil-fired comfort equipment shall have minimum efficiency levels of not less than 90% AFUE (heating) or an HSPF of not less than 7.8 and a SEER of not less than 12 for cooling equipment.

(b) Gas and oil-fired comfort equipment (hot water boilers) shall have minimum efficiency levels of not less than 83% AFUE.

(c) Ground source heat pump systems shall have minimum efficiency levels of not less than 3.0 COP.

(d) Data furnished by the equipment supplier or certified under a nationally recognized certification program or rating procedure shall be used to satisfy the requirements of this subrule.

(3) With respect to high-efficiency windows and doors trade-off option, openings in the opaque exterior building envelope shall have a thermal resistance value (r) of not less than R3.5.

(4) Both of the following provisions apply to roof/ceiling and wall insulation trade-off option:

(a) The thermal resistance value (r) of the insulation for the roof/ ceiling assembly comprising the building envelope shall not be less than R38 in all zones.

(b) The thermal resistance value (r) of the insulation for the exterior walls comprising the building envelope above the foundation wall shall not be less than the following:

(i) R15 for zone 1.

(ii) R19 for zone 2.

(iii) R24 for zone 3.

(5) All of the following provisions apply to the basement insulation option:

(a) The exterior basement walls comprising the building envelope shall have insulation that has a thermal resistance R-value of not less than R5 for all zones. The wall insulation shall extend from the top of the foundation wall to the level of the basement floor. The insulation shall be an approved type for the conditions implemented. The method of insulating shall be at the discretion of the builder.

(b) Insulated basement walls, including the below-grade portion, are included as part of the gross area of exterior walls if the windows and doors meet the fenestration and door requirements in R 408.31075 and R 408.31082(2).

(c) To be eligible as an insulation trade-off option, basement walls shall be in compliance with all of the following provisions:

(i) Be exterior walls comprising the building envelope and not supporting an insulated floor.

(ii) Not be required to be insulated by R 408.31080.

(iii) Be not less than 50% of the total basement wall area.

(6) All of the following provisions apply to the air leakage control trade-off option:

(a) Air leakage locations to be treated are openings in the building envelope between conditioned space and unconditioned space or the outside.

Air leakage locations include locations that have opening, cracks, and joints, as follows:

(i) Between wall cavities and window or door frames.

(ii) Between wall assemblies or their sill plates and foundations.

(iii) Between walls and roof/ceiling or attic/ceiling seals.

(iv) Between separate wall panels.

(v) Penetrations of utility services through walls, floors, and roof assemblies.

(vi) Penetrations of the wall cavities, including interior walls, through the top plates or bottom plates, or both.

(b) Air leakage control treatment includes sealing around all plumbing and electrical penetrations, recessed

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lights, bathtubs, and showers and at attic, knee wall, and crawl space access panels.

(c) Exterior joints, seams, or penetrations in the building envelope that are sources of air leakage shall be sealed with durable sealant materials or closed with gasketing systems.

(d) When installed in the building envelope, a recessed lighting fixture shall be in compliance with either of the following:

(i) A type IC rated, installed lighting fixture inside a sealed container constructed from appropriate fire rated materials or other airtight assembly manufactured to house a type IC rated lighting fixture.

(ii) A type IC airtight or equally rated lighting fixture which is tested at 75 Pascal (Pa) (1.57 pounds per square foot) with an air leakage rating of 2.0 cubic feet per minute (cfm) or less or which is in compliance with the state of Washington restricted airflow requirements and is labeled as such. (e) Documentation of proposed measures providing a reduction in air changes per hour (ACH) or results of a post-construction blower-door test (0.50 ACH) may be provided to the building official to receive credit for the air leakage control trade-off option. Documentation submitted by a person licensed under article 24 of Act No. 299 of the Public Acts of 1980, as amended, being §339.2401 et seq. of the Michigan Compiled Laws, shall not be required to be prepared, sealed, or submitted by an architect, professional engineer, or other consultant.

(7) The decision of which trade-off option to use to achieve compliance with the code shall be at the sole discretion of the builder and shall be accepted by the building official.

(8) Electing a trade-off option does not exempt conformance with other requirements in R 408.31073 and R 408.31082.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31084 Residential building design by systems analysis and design of buildings utilizing renewable sources.

Rule 1084. (1) This rule establishes design criteria, in terms of heat energy use, in a residential building, including the building envelope components. Compliance with this rule shall require an analysis of the building energy usage as a system of the building envelope components and the heating source or sources proposed, hereinafter called an “energy analysis.” A building designed in accordance with the code will be deemed as complying with the code if the calculated heating energy consumption is not more than that of a standard design building which has a building envelope designed in accordance with this rule, R 408.31073, R 408.31074 to R 408.31081, R 408.31082 and 408.31083, and which has a heating source that has an efficiency of 78% AFUE. For a proposed alternate building design to be considered similar to the standard design, the proposed alternate building design shall be the same as the standard design for all of the following:

(a) Equal floor area.

(b) Thermal envelope area.

(c) Exterior design conditions.

(d) Occupancy.

(e) Climate data.

(f) Usage operational schedule.

(2) The standard building design that is in compliance with the requirements of R 408.31073, R 408.31074 to R 408.31081, R 408.31082, and 408.31083 shall be designed to include all of the following:

(a) Gas and oil-fired comfort equipment that has an efficiency level of 78% AFUE.

(b) An air changes per hour (ACH) rate of 0.80 for the purpose of calculation only.

(c) If the proposed design takes credit for reduced ACH levels, then documentation of measures for the reduction or results of a post-construction blower-door test may be provided to the building official to receive credit for the air leakage reduction. Documents submitted by a person licensed under article 24 of Act No. 299 of the Public Acts of 1980, as amended, being §339.2401 et seq. of the Michigan Compiled Laws, need not be prepared, sealed, or submitted by an architect, professional engineer, or other consultant.

(d) The typical meteorological year (TMY), or its ersatz equivalent, from the national oceanic and atmospheric administration (NOAA) or an approved equivalent, for the closest available location, shall be the same for the proposed alternative design. The builder may choose a simplified heating degree day (HDD) approach for the appropriate zone, as follows:

(i) Zone 1 6900 HDD.

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- (ii) Zone 2 7900 HDD.
- (iii) Zone 3 9300 HDD.

The decision of which method to use shall be the sole discretion of the builder and shall be accepted by the building official.

(3) The analysis of the heating energy usage of the standard and the proposed alternative building design shall use the same methodology or calculation tool for comparison.

(4) A proposed alternative design that is submitted as an exception to the standard design criteria shall be accompanied by a heating energy analysis comparison report. The report shall provide technical detail on the 2 building and system designs and on the data used in, and resulting from, the comparative analysis to verify that both the analysis and the design meet the criteria of this rule, R 408.31085, and R 408.31086. A report submitted by a person licensed under article 24 of Act No. 299 of the Public Acts of 1980, as amended, being §339.2401 et seq. of the Michigan Compiled Laws, to a building official shall not be required to be prepared, sealed, or submitted by an architect, professional engineer, or other consultant.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31085 Renewable energy source analysis.

Rule 1085. (1) A proposed building that utilizes renewable energy sources for all or part of its energy source shall be in compliance with the requirements of R 408.31084, except that the renewable energy may be excluded from the total heating energy consumption allowed for the building.

(2) To qualify for the exclusion specified in subrule (1) of this rule, a renewable energy shall be derived from a specific collection, storage, or distribution system.

(3) The criteria specified in R 408.31084 shall apply to the proposed alternative designs that utilize renewable sources of energy. (4) The heating energy derived from renewable sources and the reduction in conventional heating energy requirements shall be separately identified from the overall building energy use.

(5) Supporting documentation on the basis of the performance estimates for the renewable energy sources shall be submitted to the building official.

(6) If a person licensed under article 24 of Act No. 299 of the Public Acts of 1980, as amended, being §339.2401 et seq. of the Michigan Compiled Laws, submits the documentation specified in subrule (5) of this rule, then a building official shall not require that the documentation be prepared, sealed, or submitted by an architect, professional engineer, or other consultant.

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 480.31086 Heating energy analysis comparison report.

Rule 1086. (1) This rule provides a minimum requirement for a heating energy analysis comparison report. This rule provides flexibility to permit the use of innovative approaches and techniques.

(2) A comparison report shall include a basic description of the proposed alternate building design and shall identify any exceptions to the standard design criteria.

(3) The abbreviated report form 1086.3 may be used to compare a proposed alternative house with a standard design house that is in compliance with this rule through the systems analysis method. The standard design house uses the same total area of each building envelope component from the proposed alternative house. If the proposed alternative house A/R total (line 14 or line 17 of form 1086.3) is less than or equal to the standard design house (line I or line L of form 1086.3), then the house is in compliance with the code.

(4) Alternative standard design constants (table 1086.4) may be used for the specific site weather data (heating degree days) of the proposed alternative house location.

(5) Abbreviated report form 1086.3 reads as follows:

TABLE 1086.4

**ALTERNATIVE STANDARD DESIGN CONSTANTS (1/R)
FOR SYSTEMS ANALYSIS APPROACH**

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Heating Degree Days	6000- 6499	6500 6999	7000 7499	7500 7999	8000 8499	8500 8999	9000+
Roof/ceiling	0.038	0.036	0.034	0.032	0.030	0.030	0.030
Gross wall	0.20	0.16	0.15	0.15	0.14	0.14	0.13
Foundation/floor Floors over Unconditioned space	0.05	0.05	0.05	0.05	0.033	0.033	0.033
Slab-on-grade Unheated slab	0.18	0.17	0.16	0.15	0.14	0.13	0.13
Heated slab	0.13	0.12	0.12	0.11	0.10	0.10	0.10
Crawl space	0.20	0.16	0.15	0.15	0.14	0.14	0.13
Basement wall	0.20	0.16	0.15	0.15	0.14	0.14	0.13

History: 1999 MR 1, Eff. Mar. 31, 1999.

R 408.31099 Rescission.

Rule 1099. R 408.31001 to R 408.31055 of the Michigan Administrative Code, appearing on pages 4149 to 4152 of the 1979 Michigan Administrative Code and pages 602 and 603 of the 1981 Annual Supplement to the Code, are rescinded.

History: 1999 MR 1, Eff. Mar. 31, 1999.

PART 11. PREMANUFACTURED UNITS

R 408.31103

Source: 1984 AACS.

R 408.31104

Source: 1984 AACS.

R 408.31105

Source: 1984 AACS.

R 408.31106

Source: 1984 AACS.

R 408.31111

Source: 1984 AACS.

R 408.31113

Source: 1984 AACS.

R 408.31122

Source: 1984 AACS.

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R 408.31132
Source: 1984 AACs.

R 408.31133
Source: 1984 AACs.

R 408.31134
Source: 1984 AACs.

R 408.31135
Source: 1984 AACs.

R 408.31136
Source: 1984 AACs.

R 408.31137
Source: 1984 AACs.

R 408.31138
Source: 1984 AACs.

R 408.31139
Source: 1984 AACs.

R 408.31141
Source: 1984 AACs.

R 408.31142
Source: 1984 AACs.

R 408.31144
Source: 1984 AACs.

R 408.31145
Source: 1984 AACs.

R 408.31152
Source: 1984 AACs.

R 408.31153
Source: 1984 AACs.

R 408.31162
Source: 1984 AACs.

R 408.31167
Source: 1984 AACs.

R 408.31168
Source: 1984 AACs.

R 408.31172
Source: 1984 AACs.

R 408.31174
Source: 1984 AACs.

R 408.31194
Source: 1984 AACs.

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CONSTRUCTION SAFETY STANDARDS

(By authority conferred on the director of the department of consumer and industry services by sections 19 and 21 of Act No. 154 of the Public Acts of 1974, as amended, and Executive Reorganization Order No. 1996-2, being §§408.1019, 408.1021, and 445.2001 of the Michigan Compiled Laws)

PART 1. GENERAL RULES

R 408.40101

Source: 1983 AACCS.

R 408.40102 Definitions.

Rule 102. (1) "Accident prevention program" means the program by which an employer provides instruction and safety training to an employee in the recognition and avoidance of hazards.

(2) "Aisle" means a designated path of travel for equipment and employees.

(3) "Approved" means approval by the director of the department of consumer and industry services or by the director's duly designated representative.

(4) "Confined space" means a space, that, because of its physical construction, could be subject to the accumulation of loose materials or explosive, toxic, or flammable contaminants or could have an oxygen-deficient atmosphere. All of the following are examples of confined spaces:

(a) Storage tanks.

(b) Process vessels.

(c) Bins.

(d) Boilers.

(e) Ventilation ducts.

(f) Sewers.

(g) Underground utility vaults.

(h) Tunnels after construction is completed.

(i) Pipelines.

(5) "Equivalent" means an alternate design or feature that provides at least as effective a degree of safety or a greater degree of safety.

(6) "Hazard" means a condition or procedure that is causing or is likely to cause serious physical harm or death to an employee.

(7) "Potable water" means water that is in compliance with the provisions of Act No. 399 of the Public Acts of 1976, as amended, being S325.1001 et seq. of the Michigan Compiled Laws.

(8) "Qualified employee" means one who, by knowledge, training, and experience, has successfully demonstrated to the employer his or her ability to solve or resolve problems relating to the subject matter, the work, or the project.

History: 1954 ACS 78, Eff. Mar. 2, 1974; 1954 ACS 88, Eff. Sept. 16, 1976; 1979 AC; 1979 ACS 14, Eff. June 2, 1983; 1995 MR 7, Eff. Aug. 5, 1995.

R 408.40103—R 408.40106

Source: 1997 AACCS.

R 408.40111, R 408.40112

Source: 1997 AACCS.

R 408.40114

Source: 1995 AACCS.

R 408.40115

Source: 1995 AACCS.

R 408.40116

Source: 1983 AACCS.

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R 408.40118

Source: 1983 AACS.

R 408.40119

Source: 1983 AACS.

R 408.40120

Source: 1996 AACS.

R 408.40121

Source: 1983 AACS.

R 408.40122 Boilers and pressure vessels.

Rule 122. (1) The installation, inspection, testing, marking, and certification of a pressure vessel shall be as prescribed in section viii on unfired pressure vessels of the ASME boiler and pressure vessel code of 1989, which is adopted by reference in these rules and may be inspected at the Lansing office of the department of consumer and industry services. This code may be purchased at a cost as of the time of adoption of these rules of \$310.00 from either the American Society of Mechanical Engineers, Standards Department, United Engineering Center, 345 E. 47th Street, New York, New York 10017, or from the Michigan Department of Labor, Safety Standards Division, 7150 Harris Drive, Box 30015, Lansing, Michigan 48909. (2) An employer shall not use a boiler to perform construction operations unless the employer has a valid certification issued by the boiler division of the Michigan department of consumer and industry services.

History: 1979 ACS 14, Eff. June 2, 1983; 1995 MR 7, Eff. Aug. 5, 1995.

R 408.40123

Source: 1983 AACS.

R 408.40125

Source: 1983 AACS.

R 408.40126

Source: 1983 AACS.

R 408.40127

Source: 1995 AACS.

R 408.40128

Source: 1995 AACS.

R 408.40129

Source: 1995 AACS.

R 408.40130

Source: 1995 AACS.

R 408.40131

Source: 1995 AACS.

R 408.40132

Source: 1995 AACS.

R 408.40133

Source: 1995 AACS.

PART 2. MASONRY WALL BRACING

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R 408.40201

Source: 1989 AACS.

R 408.40202

Source: 1989 AACS.

R 408.40203

Source: 1989 AACS.

R 408.40204

Source: 1989 AACS.

R 408.40205

Source: 1989 AACS.

R 408.40206

Source: 1989 AACS.

R 408.40207

Source: 1989 AACS.

R 408.40208

Source: 1989 AACS.

R 408.40209

Source: 1989 AACS.

R 408.40210

Source: 1989 AACS.

PART 6. PERSONAL PROTECTIVE EQUIPMENT

R 408.40601

Source: 1980 AACS.

R 408.40615 Definitions; H to O.

Rule 615. (1) "Helmet," sometimes called a hard hat or cap, means a rigid device that is worn to provide protection for the head.

(2) "Hood" means a device which is worn to provide protection against acids, chemicals, abrasives, and temperature extremes and which entirely encloses the whole head, including the face and neck.

(3) "Lanyard" means a device which is suitable for supporting 1 person and which has 1 end fastened to a safety belt or harness and the other end secured to a substantial object or a lifeline.

(4) "Lifeline" sometimes called a static line or a catenary line, means a rope to which a lanyard or safety belt or harness is attached.

(5) "Lineman's belt," sometimes called a body belt, means a device that has loops and holsters for holding tools and D rings to which a safety strap is attached.

(6) "O.D." means optical density and refers to the light refractive characteristics of a lens.

History: 1979 ACS 4, Eff. Dec. 9, 1980; 1979 ACS 12, Eff. Dec. 10, 1982; 1996 MR 8, Eff. Sept. 19, 1996; 1997 MR 7, Eff. Jul. 23, 1999.

R 408.40616 Definitions; S.

Rule 616. (1) "Safety belt" means a device which is worn around the waist and which, by reason of its attachment to a device, restricts the fall of an employee.

(2) "Safety harness" means a device which is worn over the shoulders and around the chest and which, by reason of its attachment to a device, restricts the fall of an employee.

(3) "Safety line" means a device used for emergency rescue work.

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(4) "Safety strap," sometimes called a safety rope, means an adjustable device used to hold an employee to a fixed object, such as a pole, ladder, or tower. A safety strap is fastened by snap hooks to the D rings of a lineman's body belt.

(5) "Sanitizing" means an act or process of destroying organisms that may cause disease.

History: 1979 ACS 4, Eff. Dec. 9, 1980; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 7, Eff. Jul. 23, 1999.

R 408.40617

Source: 1985 AACS.

R 408.40621 Certification of head protection.

Rule 621. (1) A class A helmet shall bear a certification by the manufacturer that the helmet is as prescribed in ANSI standard Z89.1-1986, industrial head protection, which is adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost of \$24.00 as of the time of adoption of these rules from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909.

(2) A class B helmet for the protection of an employee exposed to voltages of more than 600 volts shall bear a certification by the manufacturer that the helmet is as prescribed in ANSI standard Z89.2-1986, industrial protective helmets for electrical workers, which is adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost of \$24.00 as of time of adoption of these rules from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

History: 1979 ACS 4, Eff. Dec. 9, 1980; 1999 MR 7, Eff. Jul. 23, 1999.

R 408.40622

Source: 1980 AACS.

R 408.40623 Certification of face and eye protection.

Rule 623. Except for the devices required by R 408.40624(6), all face and eye protection devices shall bear a certification by the manufacturer that the device has been produced according to ANSI standard Z87.1, as revised in 1991, occupational and educational eye and face protection, which is adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost of \$42.00 as of the time of adoption of these rules from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909. If it is impractical for the protection device to bear the certification, then the container for the device shall bear the certification.

History: 1979 ACS 4, Eff. Dec. 9, 1980; 1999 MR 7, Eff. Jul. 23, 1999.

R 408.40624

Source: 1988 AACS.

R 408.40625 Certification and use of foot protection.

Rule 625. Safety toe footwear shall bear a permanent mark to show the manufacturer's name or trademark and to show certification of compliance with ANSI standard Z.41-1991, protective foot wear personal protection, which is adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost of \$20.00 as of the time of adoption of these rules from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

History: 1979 ACS 4, Eff. Dec. 9, 1980; 1979 ACS 12, Eff. Dec. 10, 1982; 1999 MR 7, Eff. Jul. 23, 1999.

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R 408.40626

Source: 1982 AACs.

R 408.40627

Source: 1980 AACs.

R 408.40631 Protection from unguarded surfaces.

Rule 631. (1) An employer shall ensure that an employee whose protection from falling is not covered by another part of the construction safety standards and who works more than 10 feet above the ground or floor from an unguarded work surface or who, regardless of height, works from an unguarded work surface above or adjacent to, or above and adjacent to, a specific hazard, such as, but not limited to, dangerous equipment or an open tank or vat of hazardous substances, is either secured by a rope grab to a lifeline or to a structure or is protected by a safety net prescribed in R 408.40635.

(2) Subrule (1) of this rule does not apply to an employee who is doing any of the following:

(a) Performing the operations of making initial connections of structural shapes up to 30 feet in height above the floor, water, or ground.

(b) Erecting a hoist, derrick, scaffold, or elevator if it is impractical to affix a lifeline, a lanyard, or a safety net.

(c) Overhand bricklaying if the mechanic is not required to reach more than 10 inches below the normal work surface.

(3) An employer shall ensure that a lifeline, safety belt, and a lanyard is used only for employee safeguarding. An employer shall ensure that a lifeline, safety belt, or lanyard actually subjected to inservice loading is immediately removed from service and is not used again for employee safeguarding.

(4) An employer shall ensure that a lifeline is secured directly above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,400 pounds.

(5) An employer shall ensure that a lifeline used on rock-scaling operations or used in an area where the lifeline may be subjected to cutting or abrasion is a minimum of 7/8-inch wire core manila rope or equivalent. For other applications, an employer shall ensure that a minimum of 3/4-inch manila rope, or equivalent, that has a minimum breaking strength of 5,400 pounds is used.

(6) An employer shall ensure that a safety belt lanyard is a minimum of 1/2-inch nylon rope, or equivalent, that has a maximum length which provides for a vertical drop of not more than 6 feet from the point that the rope is attached to the body.

(7) An employer shall ensure that a safety belt, safety harness, lanyard, and lifeline is constructed as prescribed in ANSI standard A10.14-1991, requirements for safety belts, harnesses, lanyards, and lifelines for construction and demolition use, which is adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost as of the time of adoption of these rules of \$40.00 from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(8) A safety belt or safety harness purchased after the effective date of this part shall bear certification that it has been constructed as prescribed according to ANSI standard A10.14-1991.

History: 1999 MR 7, Eff. Jul. 23, 1999.

R 408.40632 Safety lines.

Rule 632. (1) An employer shall ensure that a safety line is used for emergency rescue work and is not subjected to shock loading.

(2) An employer shall ensure that a safety line is not less than 1/2-inch diameter first-grade manila rope or equivalent.

History: 1999 MR 7, Eff. July 23, 1999.

R 408.40633

Source: 1996 AACs.

R 408.40634

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Source: 1980 AACs.

R 408.40635 Safety nets.

Rule 635. (1) An employer shall provide safety nets if a workplace is more than 30 feet above the ground, water, or other surfaces and if the use of ladders, scaffolds, catch platforms, temporary floors, safety lines, or safety belts is impractical.

(2) If safety net protection is used, an employer shall ensure that operations are not undertaken until the net is in place and has been tested as follows:

(a) A 250-pound test weight shall be dropped from a height of 50 feet, or a 500-pound test weight from a height of 25 feet, into the approximate center of each panel of the net. The test weight shall be a sand-filled canvas bag that is approximately 5 feet in length.

(b) A safety net shall be field-tested and inspected by a qualified person who is designated as responsible for the safety of the employees to be protected. A field test tag shall be affixed to the net at an accessible location and show the test date and the name of the qualified person who conducted the test.

(c) The designated qualified person shall test a net which is in place and which is continuously used not less than once every 30 days. The designated qualified person shall test a net which is in place and which has not been used in a 30-day period before use.

(d) A net exposed to oil, grease, acid, or other materials which have a deteriorating effect on the net shall be constructed of a material that is resistant to the deteriorating effects.

(3) An employer shall ensure that a net extends 8 feet beyond the edge of the work surface where an employee is exposed and is installed as close under the work surface as practical, but not more than 25 feet below the work surface. An employer shall ensure that the net is hung with sufficient clearance to prevent an employee from coming in contact with the surface below. An employer shall determine the clearance by impact load testing as required in subrule (2) of this rule.

(4) An employer shall ensure that the mesh size of a net is not more than 6 inches by 6 inches.

(5) An employer shall ensure that a net purchased after the effective date of this part bears a label certifying an accepted performance of 17,500 foot-pounds minimum impact resistance for each panel. An employer shall ensure that the edge ropes provide a minimum breaking strength of 5,000 pounds.

(6) An employer shall ensure that forged steel safety hooks or shackles are used to fasten the net to its supports.

(7) An employer shall ensure that connections between net panels develop a safety net that has the full strength of each panel.

(8) An employer shall maintain a safety net free of debris that might cause injury to a falling employee.

(9) If an employee working below a safety net is exposed to falling tools or other objects, then an employer shall ensure that a supplemental net, or equivalent material capable of withstanding the impact, is laid inside the safety net to protect the employee.

History: 1999 MR 7, Eff. Jul. 23, 1999

R 408.40636

Source: 1980 AACs.

R 408.40641 Rubber protective equipment; certification; use and storage.

Rule 641. (1) An employer shall ensure that all of the following, when required by R 408.41601 et seq. or R 408.41701 et seq., bear a permanent mark to show the manufacturer's name or trademark and certification of compliance with the appropriate ASTM standard as listed in table 4:

(a) Rubber insulating gloves.

(b) Rubber insulating matting.

(c) Rubber insulating blankets.

(d) Rubber insulating covers.

(e) Rubber insulating line hose.

(f) Rubber insulating sleeves.

The following standards listed in table 4 are adopted by reference in the rules and may be inspected at the Lansing office of the department of consumer and industry services. The ASTM standards may be

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purchased from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. The ASTM customer service telephone number is (610) 832-9585. Each of these standards may also be purchased at a cost of \$30.00 as of the time of adoption of this rule from the Standards Division, Michigan Department of Consumer and Industry Services, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(2) Table 4 reads as follows:

TABLE 4

ITEM	ASTM	COST
Rubber Insulating Gloves	D120-95	\$30.00
Rubber Insulating Matting	D178-93	\$30.00
Rubber Insulating Blankets	D1048-98	\$30.00
Rubber Insulating Covers	D1049-98	\$30.00
Rubber Insulating Line Hose	D1050-90	\$30.00
Rubber Insulating Sleeves	D1051-95	\$30.00

(3) Material other than rubber that offers equivalent or greater protection may be used in insulating gloves, insulating matting, insulating blankets, insulating covers, insulating line hose, and insulating sleeves if the material is certified to meet the appropriate ASTM standard tests.

(4) A trained employee or outside service shall visually inspect rubber insulating sleeves and blankets and perform an electrical test within 12 months after purchase and not less than once every 12 months after the initial inspection and electrical test. An employer shall ensure that the equipment is dated or coded with the date of purchase or issuance and the date of each periodic test. The trained employee or outside service shall perform the electrical test in accordance with the applicable American society for testing and materials standards listed in table 4.

(5) The employee who is to use the equipment shall visually inspect the equipment listed in table 4 for cracks, cuts, punctures, and thin spots before each use. If insulating gloves are required and used, then that employee shall manually air test the gloves daily before starting work.

(6) The employer shall ensure that equipment that does meet the electrical test requirements, visual inspection, or manual air test for flaws, scuffs, snags, punctures, and foreign substances, such as oil, dirt, or grease shall be removed from service.

(7) An employer shall ensure that an insulated blanket, glove, or sleeve is capable of withstanding the voltage to which it may be subjected.

(8) The employer shall keep insulating gloves, sleeves, and blankets as free as possible from ozone, chemicals, heat, oils, solvents, damaging vapors, fumes, electrical discharges, and sunlight. The employer shall store the gloves, sleeves, and blankets in a bag, box, container, or compartment that is designed and used exclusively for their storage and shall not fold, crease, or compress the gloves, sleeves, and blankets.

(9) The maximum intervals for the electrical retesting of gloves required by ASTM F496-97 are shown in the following table:

TABLE 5
ELECTRICAL RETESTING OF GLOVES

DESCRIPTION	MAXIMUM INTERVAL BETWEEN TESTS
1. Gloves, in use	6 months
2. Gloves, in use by telecommunication industry	9 months
3. Gloves, tested but not issued for service	12 months

Note: Work practices and test experience shall be taken into consideration in determining intervals between tests.

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History: 1979 ACS 4, Eff. Dec. 9, 1980; 1979 ACS 14, Eff. June 2, 1983; 1999 MR 7, Eff. Jul. 23, 1999.

PART 7. WELDING AND CUTTING

R 408.40701

Source: 1980 AACS.

R 408.40705

Source: 1980 AACS.

R 408.40706

Source: 1980 AACS.

R 408.40707

Source: 1980 AACS.

R 408.40711

Source: 1980 AACS.

R 408.40712

Source: 1980 AACS.

R 408.40713

Source: 1996 AACS.

R 408.40714

Source: 1980 AACS.

R 408.40715

Source: 1980 AACS.

R 408.40721

Source: 1980 AACS.

R 408.40722

Source: 1980 AACS.

R 408.40723

Source: 1980 AACS.

R 408.40729

Source: 1980 AACS.

R 408.40731

Source: 1980 AACS.

R 408.40732

Source: 1980 AACS.

R 408.40741

Source: 1980 AACS.

R 408.40742

Source: 1980 AACS.

R 408.40743

Source: 1980 AACS.

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R 408.40744
Source: 1980 AACS.

R 408.40745
Source: 1980 AACS.

R 408.40746
Source: 1982 AACS.

R 408.40747
Source: 1980 AACS.

R 408.40751
Source: 1982 AACS.

R 408.40761
Source: 1980 AACS.

R 408.40762
Source: 1980 AACS.

PART 8. HANDLING AND STORAGE OF MATERIALS

R 408.40818
Source: 1996 AACS.

R 408.40819
Source: 1983 AACS.

R 408.40821
Source: 1996 AACS.

R 408.40833
Source: 1983 AACS.

R 408.40834
Source: 1983 AACS.

R 408.40836
Source: 1983 AACS.

PART 9. EXCAVATION, TRENCHING, AND SHORING

R 408.40925
Source: 1993 AACS.

R 408.40932
Source: 1993 AACS.

R 408.40934
Source: 1993 AACS.

R 408.40943
Source: 1993 AACS.

R 408.40944
Source: 1993 AACS.

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R 408.40945

Source: 1993 AACS.

R 408.40946

Source: 1988 AACS.

R 408.40951

Source: 1996 AACS.

R 408.40953

Source: 1993 AACS.

PART 10. LIFTING AND DIGGING EQUIPMENT

R 408.41001

Source: 1997 AACS.

R 408.41001a Adoption of federal OSHA standards.

Rule 1001a. (1) The provisions of 29 C.F.R. §§1926.555 and 1910.183, except as amended in this rule, are adopted by reference in these rules. The federal construction and general industry standards are available at no charge as of the time of adoption of these rules from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909, or from the United States Department of Labor, Occupational Safety and Health Administration, 801 S. Waverly Road, Lansing, Michigan 48917.

(2) As of the effective date of this part, subpart G referenced in the provisions of 19 C.F.R. §1926.555 means Part 22 “Signals, Signs, Tags, and Barricades” of the rules of the construction safety standards commission, being R 408.42201 et seq. of the Michigan Administrative Code.

REFERENCES	
Federal OSHA	Michigan Construction Safety Standards Commission
29 C.F.R. §1926.555 Subpart G	Part 22. Signals, Signs, Tags, and Barricades

(3) The provisions of 29 C.F.R. §1926.556, as incorporated by reference under section 14(1) of Act No. 154 of the Public Acts of 1974, as amended, being §408.1014(1) of the Michigan Compiled Laws, are hereby rescinded as authorized by section 14(1).

(4) The provisions of 29 C.F.R. §1926.555 Conveyors, are amended to read as follows:

(a) Means for stopping the motor or engine shall be provided at the operator's station. Conveyor systems shall be equipped with an audible warning signal to be sounded immediately before starting up the conveyor.

(b) If the operator's station is at a remote point, the employer shall provide similar provisions for stopping the motor or engine at the motor or engine location.

(c) Emergency stop switches shall be arranged so that the conveyor cannot be started again until the actuating stop switch has been reset to running or the “on” position.

(d) Screw conveyors shall be guarded to prevent employee contact with turning flights.

(e) Where a conveyor passes over work areas, aisles, or thoroughfares, the employer shall provide suitable guards to protect employees required to work below the conveyors.

(f) The employer shall ensure that all crossovers, aisles, and passageways are conspicuously marked by suitable signs, as required by subpart G of this part.

(g) The employer shall ensure that conveyors are locked out or otherwise rendered inoperable, and tagged out with a “DO NOT OPERATE” tag during repairs and when operation is hazardous to employees performing maintenance work.

(h) All conveyors in use shall meet the applicable requirements for design, construction, inspection, testing,

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maintenance, and operation, as prescribed in the ANSI standard B20.1, "Safety Standard for Conveyors, and Related Equipment," 1996 edition.

(5) Helicopters. The provisions of 29 C.F.R. §1910.183 are amended to read as follows:

(a) Helicopter cranes shall be in compliance with all applicable regulations of the Federal Aviation Administration.

(b) The employer shall ensure that before each day's operation of a helicopter, a briefing is conducted. The briefing shall set forth the plan of operation for the pilot and ground personnel.

(c) Helicopter loads shall be properly slung. A tag line shall be of a length that the tag line shall not be drawn up into the rotors. Pressed sleeve, swedged eyes, or equivalent means shall be used for all freely suspended loads to prevent hand splices from spinning open or cable clamps from loosening.

(d) All electrically operated cargo hooks shall have the electrical activating device designed and installed to prevent inadvertent operation. In addition, the cargo hooks shall be equipped with an emergency mechanical control for releasing the load. The employer shall ensure that the hooks are tested before each day's operation by a competent person to determine that the release functions properly, both electrically and mechanically.

(e) Both of the following provisions apply to personal protective equipment:

(i) The employer shall provide personal protective equipment and the employer shall ensure its use by employees receiving the load. Personal protective equipment shall consist of complete eye protection and hardhats secured by chin-straps and shall be provided for as prescribed in construction safety standard, Part 6 "Personal Protective Equipment," being R 408.40601 et seq. of the Michigan Administrative Code.

(ii) Loose-fitting clothing likely to flap in rotor downwash, and thus be snagged on the hoist line, shall not be worn.

(f) The employer shall take all necessary precautions to protect employees from flying objects in the rotor downwash. All loose gear which is within 100 feet of where the load is lifted or deposited or which is within any other area susceptible to rotor downwash shall be secured or removed.

(g) The employer shall ensure that good housekeeping is maintained in all helicopter loading and unloading areas.

(h) The size and weight of loads and the manner in which loads are connected to the helicopter shall be checked. A lift may not be made if the helicopter operator believes the lift cannot be made safely.

(i) An employer shall assure that a safe means of access is provided for employees to reach the hoist line hook and engage or disengage cargo slings when an employee is required to perform work under a hovering craft. Employees shall not perform work under a hovering craft, except when necessary to hook or unhook loads.

(j) Static charge on the suspended load shall be dissipated with a grounding device before ground personnel touch the suspended load, unless protective rubber gloves that are provided for as prescribed in construction safety standard, Part 6 "Personal Protective Equipment," being R 408.40601 et seq. of the Michigan Administrative Code, are being worn by all personnel who may be required to touch the suspended load.

(k) The weight of an external load shall not exceed the helicopter manufacturer's rating.

(l) Hoist wires or other gear, except for pulling lines or conductors that are allowed to pay out from a container or roll off a reel, shall not be attached to any fixed ground structure and shall not be allowed to foul on any fixed structure.

(m) The employer shall instruct and ensure, that when visibility is reduced by dust or other conditions, ground personnel and other employees shall exercise special caution to keep clear of the main and stabilizing rotors. The employer shall take precautions to eliminate, as far as practical, the dust or other conditions reducing the visibility.

(n) An employer shall instruct the aircrew and ground personnel on the signal systems to be used and shall review the systems with the employees in advance of hoisting the load. This subdivision applies to both radio and hand signal systems. Hand signals, where used, shall be as shown in figure 1.

(o) The employer shall ensure that no employee shall approach within 50 feet of a helicopter when the rotor blades are turning, unless his or her work duties require his or her presence in that area.

(p) The employer shall instruct employees, and shall ensure, that when approaching or leaving a helicopter that has its blades rotating, all employees shall remain in full view of the pilot and keep in a crouched position. An employee shall not be permitted to work in the area from the cockpit or cabin rearward while

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blades are rotating, unless authorized by the helicopter operator to work there.

(q) The employer shall provide sufficient ground personnel to ensure that helicopter loading and unloading operations can be performed safely.

(r) There shall be constant reliable communication between the pilot and the designated employee of the ground crew who acts as a signalman during the period of loading and unloading. The signalman shall be clearly distinguishable from other ground personnel.

(s) The employer shall prohibit open fires in areas where the fires could be spread by the rotor downwash.

History: 1995 MR 7, Eff. Aug. 5, 1995; 2000 Mr 21, Eff. Jan. 4, 2001.

R 408.41002a

Source: 1995 AACS.

R 408.41003a

Source: 1995 AACS.

R 408.41004

Source: 1997 AACS.

R 408.41004a

Source: 1995 AACS.

CRANES, DERRICKS, AND EXCAVATION EQUIPMENT

R 408.41005a Adoption of standards.

Rule 1005a. (1) The standards specified in this rule are adopted by reference. They are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, United States, 80112, Web-site: WWW.GLOBAL.IHS.COM, at a cost as of the time of adoption of these rules of \$82.00, \$73.00, \$73.00, \$73.00, \$63.00, \$73.00, \$76.00, \$199.00, \$107.00, \$83.00, \$45.00, \$59.00, and \$49.00 respectively; or for review at the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Lansing, Michigan 48909.

(2) All crawler, locomotive, and truck cranes in use shall be in compliance with the requirements of the ANSI standard B30.5 "Mobile and Locomotive Cranes," 1994 edition.

(3) All mobile hydraulic cranes in use shall be in compliance with the requirements of ANSI standard B30.5 "Mobile and Locomotive Cranes," 1994 edition, except that all new mobile hydraulic cranes manufactured after August 5, 1995 shall have a positive-acting device that prevents contact between the load block or ball and the boom tip (anti-2-blocking device) or a system shall be used that deactivates the hoisting action before damage occurs in the event of a 2-blocking situation (2-blocking prevention feature).

(4) All hammerhead tower cranes in use shall be in compliance with the requirements of ANSI standard B30.3 "Construction Tower Cranes," 1996 edition.

(5) All portal, tower, and pillar cranes shall be in compliance with the requirements of ASME standard B30.4 "Portal, Tower and Pillar Cranes," 1996 edition.

(6) All overhead and gantry cranes in use shall be in compliance with the requirements of ANSI standard B30.2 "Overhead and Gantry Cranes," 1996 edition.

(7) All derricks in use shall be in compliance with the requirements of ANSI standard B30.6 "Derricks," 1995 edition.

(8) All floating cranes and floating derricks in use shall be in compliance with the requirements of ANSI standard B30.8 "Floating Cranes and Floating Derricks," 1999 edition.

(9) All base-mounted drum hoists in use shall be in compliance with the requirements of ASME standard B30.7 "Base Mounted Drum Hoists," 1994 edition.

(10) Permanent elevators under the care and custody of the employer and used by employees for work covered by this part shall be in compliance with the requirements of ANSI standard A17.1 "Safety Code/Elevator and Escalators," 1996 edition and be inspected in accordance with the requirements of ANSI standard A17.2 "Inspectors Manual for Elevators and Escalators," 1988 edition, and ANSI standard A17.2.1 "Inspectors Manual for Electric Elevators," 1996 edition.

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(11) All material hoists shall be in compliance with the requirements of ANSI standard A10.5 "Safety Requirements for Material Hoists," 1992 edition.

(12) All side boom tractors in use shall be in compliance with the requirements of ASME standard B30.14 "Side Boom Tractors," 1996 edition.

(13) All personnel hoists shall be in compliance with the requirements of ANSI A10.4 "Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations" 1990 edition.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41006a Employer responsibilities.

Rule 1006a. (1) An employer shall comply with the manufacturer's specifications and limitations applicable to the operation of cranes, derricks, and excavation equipment. If a manufacturer's specifications are not available, then the limitations assigned to the equipment shall be based on the determination of a qualified person who is competent in the field of equipment limitations, and the determination shall be appropriately documented and recorded. Attachments that are used with cranes or derricks shall not exceed the capacity, rating, or scope recommended by the manufacturer.

(2) An employer shall designate a qualified person to perform all inspections of cranes and derricks and excavation equipment as required by this part.

(3) An employer shall limit the use of a crane or derrick or excavation equipment to the following entities:

(a) An employee who has been trained and qualified to operate the type of crane or derrick or excavation equipment to which he or she is assigned.

(b) A learner who is under the direct supervision of a designated operator.

(c) Authorized maintenance personnel while performing their duties.

(4) An employer shall maintain a crane or derrick or excavation equipment and its accessories in a condition that will not endanger an operator or other employees.

(5) The original safety factor of the equipment shall not be reduced if modifications or changes are made to the equipment. Modifications or changes shall be certified by a qualified registered engineer. The capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly to reflect any modifications or changes.

(6) An employer shall comply with all other applicable requirements of this part.

(7) An employer shall comply with the requirements of the power crane and shovel associations' mobile hydraulic crane standard no. 2. The standard is available from the Power Crane and Shovel Association, Bank One Plaza, 111 E. Wisconsin Avenue, Suite 940, Milwaukee, Wisconsin 53202, or from the Standards Division, Michigan Department of Consumer and Industry Services, Box 306435, Lansing, Michigan 48909, at a cost as of the time of adoption of this rule of \$15.00.

(8) The manual provided by the crane manufacturer shall be readily accessible for the crane operator's reference at the worksite.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999.

R 408.41007a

Source: 1995 AACS.

R 408.41008a

Source: 1995 AACS.

R 408.41009a

Source: 1995 AACS.

R 408.41010a

Source: 1995 AACS.

R 408.41011a

Source: 1995 AACS.

R 408.41012a

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Source: 1995 AACS.

R 408.41013a

Source: 1995 AACS.

R 408.41014a Marking rated capacity.

Rule 1014a. (1) An employer shall ensure that a durable and legible rating chart is at the operation station for all cranes or derricks. The chart shall show all of the following information:

(a) Load capacity relating to operating radii for all boom lengths, jib lengths, and angles. Where outriggers or extra counterweights are provided by the manufacturer, alternate ratings shall be provided.

(b) Any structural change that limits the ratings.

(c) The required parts of the line for hoist reeving and the size and construction of the rope. The information specified in this subdivision is not required to be posted if it is shown in the operating manual.

(d) Essential precautionary or warning notes relative to limitations on equipment and operating procedures.

(2) In addition to the requirements of subrule (1) of this rule, where remote control stations are used to operate a hammerhead tower crane, the employer shall ensure that a durable and legible rating chart is available at each remote control station.

(3) A crane or a derrick that has a variable angle boom shall be equipped with a boom angle indicator readily visible to the operator.

History: 1995 MR 7, Eff. Aug. 5, 1995; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41015a Work platforms generally.

Rule 1015a. (1) A work platform that is suspended from a crane or derrick may be used to hoist or suspend personnel or to provide access in unique situations if use of the platform is accomplished in a manner that exposes employees to the least hazard practicable.

(2) A work platform shall be in compliance with all of the following requirements:

(a) Be designed and constructed by qualified personnel who are designated by, and responsible to, the employer and who, because of extensive knowledge, training, and experience, have successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the project.

(b) A welder who welds work platforms shall comply with the requirements of the American Welding Society (AWS) standards AWS standard IHS AWSC "Structural Welding Code," 2000 edition, AWS standard D14.1 "Welding of Industrial and Mill Cranes and Other Material Handling Equipment," 1997 edition, AWS standard B1.10 "Guide for the Nondestructive Inspection of Welds," 1986 edition, and AWS standard D14.4 "Class and Application of Welded Joints for Machinery Equipment," 1997 edition. The standards specified in this rule are adopted by reference. They are available from the Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, United States, 80112, Web-site: WWW.GLOBAL.IHS.COM, at a cost as of the time of adoption of these rules of \$438.00, \$68.00, \$84.00, and \$73.00 respectively; or for review at the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Lansing, Michigan 48909.

(c) Except for the guardrail system as specified in construction safety standard Part 45 "Fall Protection," being R 408.44501 et seq. of the Michigan Administrative Code, be of welded mild steel construction that has a minimum safety factor of 5 times the maximum intended load.

(d) Have a continuous guardrail system constructed as follows:

(i) Have a top rail which is located not less than 39 inches, nor more than 45 inches, above the platform floor and which is constructed to withstand a minimum of 5,000 pounds of force in any direction. A grab rail shall be installed inside the entire perimeter of the platform.

(ii) Have a midrail which is installed at mid-height between the top rail and platform floor and which is constructed to withstand a 200-pound side thrust.

(iii) Have a toeboard which is not less than 4 inches in nominal height and which is installed not more than 1/4 of an inch above the floor around the periphery of the work platform and have a steel grating which is either solid construction or expanded metal that does not have openings of more than 1/2 inch (1.27 cm) and which is installed between the floor and, at a minimum, the midrail. If the platform has a gate, the toeboard

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and steel grating shall be installed on the gate.

(e) Have wood planking, steel plate, or steel grating bolted or welded to the bottom of the platform and be maintained free of slip or trip hazards.

(f) Loadlines shall be capable of supporting, without failure, not less than 7 times the maximum intended load, except that where rotation resistant rope is used, the lines shall be capable of supporting, without failure, not less than 10 times the maximum intended load. The required design factor is achieved by taking the current safety factor of 3.5 as required under R 408.41005a(2) and applying the 50% derating of the crane capacity that is required in R 408.41015a(2)(m). If rotation resistant wire rope is used to hoist employees, then the employer shall ensure that the wire rope is inspected by a qualified person and a record is maintained on the crane. The record shall contain all of the following information:

(i) The size, type, and manufacturer of the wire rope.

(ii) The date the wire rope was inspected as required by R 408.41013a(1) and the condition at the time of inspection.

(iii) The name of the person who inspected the wire rope.

(g) Have an independent 4point suspension system that has a minimum safety factor of 5 times the intended load. Each leg shall be suspended at a maximum 45-degree angle from vertical toward the center using a minimum 1/2-inch diameter wire rope that has swedge fittings on each end. The wire rope shall be capable of maintaining the platform in a level position regardless of load placement. Wire rope clips are prohibited.

(h) Have the independent 4point suspension system attached to the platform using alloy anchor-type shackles with a bolt, nut, and a retaining pin or an equivalent. The suspension system shall not be used for any other purpose.

(i) Have the suspension system connected to the load line by an alloy anchor-type shackle with a bolt, nut and retaining pin, a safety hook, or equivalent. Both ends of a minimum 5/8-inch wire rope safety line shall be installed above the headache ball to the shackle and pass through the eyes of the work platform suspension system to prevent the platform from falling if disengaged from the safety hook. If a shackle is used instead of a safety hook, then the 5/8-inch wire rope safety line is not required.

(j) Have overhead protection where there is an overhead hazard. The employer shall ensure that there is sufficient headroom to allow employees to stand upright on the platform.

(k) Have a permanently affixed sign that specifies all of the following information:

(i) Maximum number of passengers.

(ii) Work platform identification number.

(iii) Maximum rated load.

(iv) Weight of the platform.

(l) Be easily identifiable by high-visibility color or marking.

(m) The total weight of the loaded personnel platform and related rigging shall not be more than 50% of the rated capacity for the radius and configuration of the crane or derrick.

(3) The employer shall ensure that the gate only opens inward to permit employee egress from, and access to, the work platform.

(4) A platform gate shall be securely fastened during all travel and shall only be opened during egress from, or access to, the work platform. The platform shall be used only for positioning employees at otherwise inaccessible locations to perform work and shall not be used as an elevator.

(5) The employer shall ensure that all rough edges exposed to contact by employees are surfaced or smoothed to prevent injury to employees from puncture or lacerations.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41016a Work platforms; load test requirements; trial lift; inspections; proof testing.

Rule 1016a. (1) Before a work platform is used after fabrication, it shall be load-tested to 2 times the maximum intended load (rated capacity).

(2) A work platform shall also be load-tested as follows:

(a) Annually, if used on a regular basis.

(b) Before use, if the interval of time between use is more than 1 year.

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- (c) After the crane or work platform has been moved to another location on the jobsite.
- (3) A load test shall follow the maximum intended lift of the work platform.
- (4) The total platform load shall be not more than 50% of the rated capacity of the lifting equipment.
- (5) After any repair or modification, a platform shall be retested to 2 times the rated capacity.
- (6) A record of the load test shall be maintained by the employer for the life of the platform.
- (7) A trial lift of the unoccupied personnel platform that is loaded at least to the anticipated lift weight shall be made from ground level, or any other location where employees will enter the platform, to each location to which the personnel platform is to be hoisted and positioned. The trial lift shall be performed immediately before placing personnel on the platform. The operator shall determine that all systems, controls and safety devices are activated and functioning properly, that interferences do not exist, and that all configurations necessary to reach the work locations will allow the generator to remain under the 50% limit of the hoist's rated capacity. Materials and tools to be used during the actual lift can be loaded in the platform as provided in R 408.41018a(10) for the trial lift. A single trial left may be performed at one time for all locations that are to be reached from a single set up position.
- (8) The trial lift shall be repeated before hoisting employees when the crane or derrick is moved and set up any new location or returned to a previously used location. The trial lift shall be repeated when the lift route is changed, unless the operator determines that the route change is not significant and the route change would not affect the safety of hoisted employees.
- (9) After the trial lift, and just before hoisting personnel, the platform should be hoisted a few inches and inspected to insure that it is secure and properly balanced. Employees shall not be hoisted unless all of the following provisions are complied with:
 - (a) Hoist ropes are free of kinks.
 - (b) Multiple part lines are not twisted around each other.
 - (c) The primary attachment is centered over the platform.
 - (d) The hoisting system shall be inspected if the load rope is slack to insure that all ropes or properly seated on drums and in sheaves.
- (10) A visual inspection of the crane or derrick, rigging, personnel platform, and the crane or dairy base support or ground shall be conducted by a competent person immediately after the trial lift to determine whether the testing has exposed a defect or produced an adverse effect upon a component or structure.
- (11) A defect is found during inspection that creates a safety hazard shall be corrected before hoisting personnel.
- (12) At each jobsite, before hoisting employees on the personnel platform and after any repair or modification, the platform and rigging shall be prooftested, as required in subrule (1) of this rule, to the platform's rated capacity by holding in a suspended position for 5 minutes with the test load evenly distributed on the platform. Prooftesting may be done concurrently with the trial lift. After prooftesting, a competent person shall inspect the platform and rigging. If a deficiency is found, it shall be corrected and another prooftesting shall be conducted. Personnel hoisting shall not be conducted until the prooftesting requirements are satisfied.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999.

R 408.41017a

Source: 1995 AACS.

R 408.41018a Work platforms; safety equipment; travel rate; crane operator; platform load; arc welding; crane operation; adverse weather conditions; leaving suspended platform.

Rule 1018a. (1) An employer shall provide an employee on a work platform with, and require them to use, the proper safety equipment as prescribed by construction safety standard Part 45 "Fall Protection," being R 408.44501 et seq. of the Michigan Administrative Code. Each employee shall wear a safety belt that has a lanyard affixed to the safety belt and the top rail of the steel guardrail system of the work platform. Standing on the guardrail system is prohibited.

(2) The maximum rate of travel of a work platform shall be 100 feet per minute. Free-spooling is prohibited when using the platform to lower personnel.

(3) The operator of the crane shall remain at the controls with the engine running when an occupied work

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platform is in the suspended position.

(4) Load and boom hoist drum brakes, swing brakes, and locking devices, such as pawls or dogs, shall be engaged when the occupied personnel platform is in a stationary working position.

(5) Communications, as required by the provisions of R 408.41017, shall be used as a safety precaution against allowing the headache ball or load blocks to come in contact with the boom tip sheave (2-blocking).

(6) An operator of a crane that is used to raise or lower a work platform shall be authorized by the employer and be properly qualified to perform the operation.

(7) An operator of a crane shall not be authorized to raise or lower a work platform unless the operator has had not less than 8 hours of experience in the operation of the specific crane or a crane of the same type and design.

(8) The employer shall hold a pre-lift meeting to review the appropriate requirements and procedures to be followed. The meeting shall be held before the trial lift at each new work location and shall be repeated for any employees who are newly assigned to the operation.

(9) All of the following entities shall attend the pre-lift meeting:

(a) The crane operator.

(b) The signalperson, if necessary for the lift.

(c) Employees to be lifted.

(d) The person who is responsible for the task to be performed.

(10) The only tools that are permitted on the work platform shall be hand tools and portable powered tools. Materials and tools shall be secured to prevent displacement and shall be evenly distributed within the confines of the platform while the platform is suspended. The total weight of compressed gas containers shall not be more than 20 pounds. Employees shall not use a work platform to transport bulk material. The total load shall not be more than the rated capacity of the work platform.

(11) If arc welding is done by an employee on the work platform, the electrode holders shall be protected from contact with metal components of the work platform.

(12) When a crane is being used to raise or lower persons on a work platform, another load shall not be attached to the work platform and another load shall not be raised or lowered at the same time by the same crane.

(13) The employer shall not permit a work platform to be used during high winds, electrical storms, snow, ice, sleet, or other adverse weather conditions that could affect the safety of the employees on the work platform or the operator of the crane.

(14) A crane or derrick that is used to raise or lower a work platform shall not be used under energized power transmission and distribution lines or within 10 feet, horizontally, at the closest point of travel from a power line as specified in table 1.

(15) Only a crane that is equipped with a boom that has a power control lowering system shall be allowed to raise or lower a work platform.

(16) The load line of a crane that is used to raise or lower a work platform shall be equipped with a swivel to reduce the wire rope-induced rotation of the work platform, unless the use of the swivel is not recommended by the wire rope manufacturer.

(17) Neither the work platform nor the crane boom shall be lowered below the point where less than 3 full wraps of rope remain on their respective drums.

(18) A crane that is used to raise or lower a work platform shall be set level on a firm base and shall have the travel lock engaged.

(19) The crane shall not travel in any direction when personnel are on the work platform.

(20) A crane that is equipped with outriggers shall have the beams and jacks fully extended to provide maximum stability and the floats shall have a stable bearing when the work platform is in use.

(21) Except for a structural steel connector or a pile driver, an employee shall not leave the suspended work platform. If a structural steel connector or a pile driver leaves the suspended platform, a gate shall be provided as prescribed in R 408.41015a(3) and (4). The gate shall be in compliance with the requirements of Part 45 "Fall Protection," being R 408.44501 et seq. of the Michigan Administrative Code. The gate shall be securely fastened during all travel and opened only during access to, or egress from, the work platform.

(22) An employee shall keep all parts of his or her body inside the platform during raising, lowering, or positioning.

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(23) An employer shall ensure the use of a positive-acting device to prevent contact between the load block or overhaul ball and the boom tip (anti-2-blocking device) or a system that shall be used to deactivate the hoisting action before damage occurs in the event of a 2-blocking situation (2 block damage prevention feature). The load line hoist drum shall have a system or device on the powertrain, other than the load hoist brake, that regulates the lowering rate of the speed of the hoist mechanism (controlled load lowering). Free-fall is prohibited.

(24) An employer shall ensure that a crane that has a telescoping boom is equipped with a device to indicate clearly to the operator, at all times, the boom's extended length or shall ensure that an accurate determination of the load radius to be used during the lift is made before hoisting personnel.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41019a

Source: 1995 AACS.

R 408.41020a Work platforms; derrick hoist machine requirements.

Rule 1020a. (1) A derrick hoist machine shall be in compliance with the provisions of ASME standard B30.7 "Base-mounted Drum Hoists," 1994 edition and be inspected on the jobsite by the employer to assure compliance. A record of the inspection shall be available on the jobsite.

(2) A derrick hoist machine shall have full power for raising and lowering the work platform. Free-spooling is prohibited.

(3) The controls of a derrick hoist machine shall be deadman controls that will return the machine to neutral and engage the drum brakes.

(4) A derrick hoist machine shall be positioned so that the distance between the drum and foot block will allow proper spooling of wire rope.

(5) A derrick hoist machine base shall be properly aligned and anchored on 4 corners to prevent movement. A 3 or 4 drum-hoist may be anchored by only the two rear corners of the base when the cables from the drums extend horizontally to the foot block, and the anchors are designed by a registered professional engineer, to resist all cable loads applied to the hoist.

(6) The foot block of a derrick hoist machine shall be anchored to prevent displacement and be supported to maintain proper alignment.

(7) All wire rope running lines shall be guarded from the drum of the hoist to the foot block and vertically where accidental contact is possible.

(8) A proper fleet angle shall be maintained between the foot block and the drum of the base-mounted drum hoist.

(9) The employer shall ensure that a hoist house for a derrick hoist machine has a roof to protect the operator from falling objects and is enclosed to protect the operator from the weather.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 Mr 21, Eff. Jan. 4, 2001.

R 408.41021a

Source: 1995 AACS.

R 408.41022a

Source: 1995 AACS.

R 408.41023a Energized parts clearances; grounding and notification.

Rule 1023a. (1) A crane, derrick, or excavation equipment shall not be operated closer to an exposed energized part than the clearances prescribed in table 1, unless adequate clearances cannot be maintained.

(2) If an adequate clearance cannot be maintained, then an employer shall notify the owner of the energized part and shall comply with either of the following provisions:

(a) An insulated barrier shall be installed on the exposed energized part.

(b) The energized part shall be de-energized and grounded.

(3) An employee who works with a load line or a load that is attached to a load line which is connected to equipment within the clearance distance prescribed in table 1 shall be provided with, and shall wear,

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personal protective equipment as prescribed in construction safety standard Part 16 “Power Transmission and Distribution,” being R 408.41601 et seq. of the Michigan Administrative Code.

(4) Material stored near an electrical distribution or transmission line shall not be closer to the line than the following distances:

(a) For a line that is rated 50 kilovolts (kv) or less - 10 feet plus the length of the material stored.

(b) For a line that is rated 50 kilovolts (kv) or more - 10 feet plus 0.4 inch for each 1 kilovolt (kv) over 50 plus the length of the material stored. (See Part 8 “Handling and Storage of Materials,” being R 408.41081 et seq. of the Michigan Administrative Code).

(5) An overhead line or equipment shall be considered to be energized until the owner or utility indicates otherwise.

(6) Table 1 reads as follows:

TABLE 1		
Voltage	Boom Raised	Clearance Boom Lowered and no Load
to 50 kv	10 feet	4 feet
50 to 345 kv	10 feet + 0.4 inch per kv over 50 kv	10 feet
346 to 750 kv	10 feet + 0.4 inch per kv over 50 kv	16 feet

(7) A person shall be designated by the employer to observe the clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.

(8) Before work near transmitter towers where an electrical charge can be induced in the equipment or materials being handled, the employer shall ensure that the transmitter is de-energized or tests shall be made to determine if electrical charge is induced on the crane. The employer shall ensure that all of the following precautions are taken when necessary to dissipate induced voltages:

(a) The equipment shall be provided with an electrical ground directly to the upper rotating structure supporting the boom.

(b) Ground jumper cables shall be attached to materials being handled by boom equipment when an electrical charge is induced while working near energized transmitters. Crews shall be provided with nonconductive poles having large alligator clips or other similar protection to attach the ground cable to the load.

(c) Combustible and flammable materials shall be removed from the immediate area before operations.

History: 1995 MR 7, Eff. Aug. 5, 1995; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41024

Source: 1997 AACCS.

R 408.41024a

Source: 1995 AACCS.

R 408.41025

Source: 1997 AACCS.

R 408.41025a Crane, derrick, and excavating equipment; operating rules generally.

Rule 1025a. (1) An operator shall not leave a crane, derrick, or excavation equipment unattended with a load suspended above the ground, floor, or platform during working operations. A bucket or blade shall not

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be left suspended above the ground when a machine is unattended.

(2) The provisions of subrule (1) of this rule do not prohibit leaving job-related equipment hanging on the hook to prevent theft or vandalism during the hours the project is shut down.

(3) A load in an elevated position shall not be detached from the load line of a crane, derrick, or excavation equipment until the load has been secured to prevent unintentional movement.

(4) The employer shall ensure that exhaust piping which is in close proximity to an employee during the normal course of operation and which would cause a burn on contact is insulated or guarded.

(5) Windows of any crane, derrick, or excavation equipment shall be equipped with safety glass or its equivalent. Visual distortions which are caused by broken or defective glass and which would affect the safe operation of the equipment when in use shall be corrected.

(6) A fuel tank filler pipe for an internal combustion engine that powers a crane or derrick shall be located or guarded to prevent the spillage of fuel onto a hot surface or electrical equipment.

(7) Where necessary for rigging or servicing, a ladder or steps shall be provided to give access to a cab roof.

(8) Handholds and steps shall be provided on all lifting and digging equipment for access to the cab. Platforms and walkways shall have slip-resistant surfaces, and guardrails as prescribed in construction safety standards Part 21 "Guarding of Walking and Working Areas," being R 408.42101 et seq. and Part 45 "Fall Protection," being R 408.44501 et seq. of the Michigan Administrative Code.

(9) Fuels shall be transported, stored, and handled as prescribed in construction safety standard Part 18 "Fire Protection and Prevention," being R 408.41801 et seq. of the Michigan Administrative Code.

(10) A load line shall not be wrapped around the material being lifted.

(11) Before starting to hoist, an operator shall do all of the following:

(a) Make sure the hoist rope is not kinked.

(b) Make sure the multiple part lines are not twisted around each other.

(c) Make sure the hook is not swinging when brought over the load.

(12) An employee shall not be permitted under a suspended load.

(13) A crane, derrick, or excavation equipment shall not be loaded beyond the rated load.

(14) When loads that are limited by hydraulic or structural competence rather than by stability are to be handled, the person who is responsible for the job shall ascertain that the weight of a load approaching rated capacity has been determined and does not exceed the capacity of the equipment.

(15) In moving a load, an operator shall avoid sudden acceleration or deceleration of a moving boom that would cause a swinging action by the load.

(16) A load shall be secured and balanced before the load is lifted more than 6 inches.

(17) An operator shall test the hoisting brakes before moving a near maximum rated load by raising the load a few inches and applying the hoisting brakes. This requirement applies to both single and multiple line reeving.

(18) A load or boom shall not be lowered below a point where less than 2 full wraps of rope remain on the drum at its lowest point.

(19) A load shall not be moved in a manner that could contact obstructions.

(20) If there is a slack rope condition, it shall be determined that the rope is properly seated and tight on the drum and in the sheaves before hoisting.

(21) The rotational speed of a crane, derrick, or excavation equipment shall be such that the center of the load does not swing out beyond the radius of the point sheave in use. A tag line shall be used when rotation of the load would be hazardous.

(22) A crane, derrick boom, or excavation equipment shall not be used for dragging a load sideways.

(23) Floats or pads that are secured to outriggers shall be used when the load to be handled at a particular radius is more than the rated load without outriggers. A wood block that is used to support an outrigger shall be in compliance with all of the following provisions:

(a) Be of a size that prevents shifting and tipping of the load.

(b) Be strong enough to resist crushing.

(c) Be free of defects that could affect its ability to support the load.

(24) Before moving a crane or excavation equipment that is carrying a load, an on-site supervisor or an operator, or both, shall determine all of the following:

(a) The position to carry the load.

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- (b) The boom location.
 - (c) The ground conditions.
 - (d) The travel route.
 - (e) The speed of movement.
 - (f) The location of overhead wires.
 - (25) While being moved from one jobsite to another, a crane or excavation equipment shall be in compliance with both of the following provisions:
 - (a) The boom shall be carried in line with the direction of movement.
 - (b) The superstructure shall be secured against rotation, except when negotiating a turn with an operator in the cab or the boom on a dolly.
 - (26) A crane or excavation equipment shall not travel with the boom at a height that could allow the boom to bounce back over the cab.
 - (27) Any crane or excavation equipment that is not equipped with a boom which has a power control lowering system (live boom) shall have the boom positively locked (dogged) to prevent lowering when personnel are working under the boom.
 - (28) For moving loads with multiple cranes or multiple pieces of excavation equipment, the requirements of subrule (24) of this rule shall be complied with. Additionally, the load, conditions, and equipment capacities shall be analyzed and a plan of operation shall be formulated.
 - (29) Clothing, personal belongings, tools, and other articles within a cab or operating enclosure shall be stored in cabinets, boxes, or by other means so as not to interfere with access or operations.
 - (30) A portable fire extinguisher that has a rating of not less than 10 BC, shall be kept in the cab or operating enclosure or where there is no cab or enclosure, shall be kept on the jobsite within a 200-foot radius of the equipment and shall be readily available. The operator and maintenance employees shall be trained in the use of the fire extinguisher.
 - (31) Where night operations are carried out, lighting shall illuminate the immediate working area to a minimum of 10 footcandles and shall not interfere with the operator's vision.
 - (32) A rope shall not be handled on a winch head without the knowledge of the operator.
 - (33) A rope shall not be used to carry current or as a ground on any crane or derrick.
 - (34) An employee shall not ride the bare hook or on a load of material suspended from the hook.
- History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41026

Source: 1997 AACS.

R 408.41026a

Source: 1995 AACS.

R 408.41027

Source: 1997 AACS.

R 408.41027a

Source: 1995 AACS.

R 408.41028

Source: 1997 AACS.

R 408.41028a Hammerhead tower crane; operating requirement.

Rule 1028a. (1) Before leaving a hammerhead tower crane unattended, an operator shall, in addition to the requirements specified in R 408.41010a(3), do all of the following:

- (a) Set the trolley brakes and other locking devices and bring the hook block to its highest position.
- (b) Secure the crane to prevent accidental travel.
- (c) Set rail clamps, where provided.
- (d) Release the swing brake to allow weathervaning, unless a 360-degree rotation is not possible. Where the

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crane must be restrained from swinging freely, the manufacturer's recommendations shall be followed.

(2) A hammerhead crane shall not be operated when wind speeds are more than the maximum velocities recommended by the manufacturer.

(3) A hammerhead crane shall not be raised to a new operating level above the structure when the wind speed is more than 20 miles per hour (32.2km/hr.) or when the wind speed is a lower velocity if so recommended by the manufacturer.

(4) In regions where winds are gusty or velocities changeable, means shall be provided to keep a crane stable if wind velocity rises above the recommended limits for climbing operations.

(5) A crane operator shall be present during all climbing operations.

(6) Where a floor of a structure is used as the supporting base for a crane, a competent person shall determine the load bearing ability of the floor and recommend necessary shoring.

(7) Crane operation during weather conditions that produce icing of the crane structure or reduced visibility shall be undertaken only in accordance with the crane manufacturer's recommendations for such conditions.

(8) An employee who is required to perform duties on the horizontal boom of a hammerhead tower crane shall be protected against falling by guardrails or safety belts and lanyards attached to lifelines in conformance with construction safety standard Part 45. Fall Protection, being R 408.44501 et seq. of the Michigan Administrative Code.

(9) A buffer shall be provided at each end of the trolley. A crane mounted on rail tracks shall be equipped with a limit switch that limits the travel of the crane on the track and with a stop or buffer at each end of the tracks.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999.

R 408.41029a

Source: 1995 AACS.

R 408.41030

Source: 1997 AACS.

R 408.41030a

Source: 1995 AACS.

R 408.41031

Source: 1997 AACS.

R 408.41031a Floating cranes and floating derricks; leaving crane or derrick unattended; rated load capacity of barge-mounted mobile crane; provision of load rating chart; compliance with employee protection requirements.

Rule 1031a. (1) An operator shall not leave a floating crane or derrick unattended until notified by the supervisor that it is safe to do so. Before leaving, the operator shall in addition to the requirements specified in R 408.41010a(3), do both of the following:

(a) Lower the boom to the boom rest or otherwise fasten it securely to prevent displacement due to wind loads or other outside forces.

(b) Engage manual locking devices in the absence of automatic holding equipment on derricks and engage swing brakes, boom brakes, and other locking devices on cranes.

(2) An operator shall engage dogs, pawls, or other positive locking mechanisms on the boom hoist.

(3) When not in use, a derrick boom shall be in compliance with 1 of the following provisions:

(a) Be laid down.

(b) Be secured to a stationary member, as near to under the boom head as possible, by attaching a sling to the load block.

(c) Be hoisted to a vertical position and secured to the mast.

(4) When not in use, a crane boom shall either be lowered to the deck of the barge and secured or secured on a boom rest or boom cradle, when provided.

(5) When a mobile crane is mounted on a barge, the rated load of the crane shall not exceed the original capacity specified by the manufacturer.

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- (6) A load rating chart, that has clearly legible letters and figures, shall be provided with each crane and shall be securely fixed at a location that is easily visible to the operator.
 - (7) When load ratings are reduced to stay within the limits for list of the barge with a crane mounted on it, a new load rating chart shall be provided.
 - (8) Mobile cranes on barges shall be positively secured.
 - (9) Cranes and derricks that are permanently installed on a barge shall have the capacity and limitations of use based on competent design criteria.
 - (10) Floating cranes and floating derricks in use shall be in compliance with the applicable requirements for design, construction, installation, testing, maintenance, and operation as prescribed by the manufacturer.
 - (11) An employer shall comply with the applicable requirements for the protection of employees who work on marine vessels specified in 29 C.F.R. §1926.605, "Marine Operations and Equipment", and in construction safety standard Part 13 "Mobile Equipment," being R 408.41301 et seq. of the Michigan Administrative Code. The standards specified in this rule are adopted by reference.
- History: 1995 MR 7, Eff. Aug. 5, 1995; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41032a

Source: 1995 AACs.

R 408.41033a Wire rope generally.

Rule 1033a. (1) A wire rope that is used on a crane or derrick shall be repaired or replaced in any of the following instances:

- (a) One third or more of the original diameter of the outside individual wires is worn.
- (b) There is kinking, crushing, bird-caging, or any other damage that results in distortion of the running portion of the wire rope structure.
- (c) The wire rope shows heat or corrosive damage.
- (d) In running ropes, there are 6 randomly distributed broken wires in 1 lay or 3 broken wires on 1 strand in 1 lay. In rotation-resistant ropes, 2 randomly distributed broken wires in 6 rope diameters or 4 randomly distributed broken wires in 30 rope diameters.
- (e) There are reductions from nominal diameter of more than the following:
 - (i) One sixty-fourth of an inch for a diameter to and including 5/16 of an inch.
 - (ii) One thirty-second of an inch for a diameter 3/8 of an inch to and including 1/2 of an inch.
 - (iii) Three sixty-fourths of an inch for a diameter 9/16 of an inch to and including 3/4 of an inch.
 - (iv) One sixteenth of an inch for a diameter 7/8 of an inch to and including 1 1/8 inches.
 - (v) Three thirty-seconds of an inch for a diameter 1 1/4 inches to and including 1 1/2 inches.
- (f) In standing ropes, there are more than 2 broken wires in 1 lay in sections beyond end connections or more than 1 broken wire at an end connection.
- (2) The unreeling or uncoiling of wire rope shall be done as recommended by the rope manufacturer and with care to avoid kinking or inducing a twist.
- (3) The defective portion of a wire rope that is removed as provided for in subrule (1) of this rule shall not be used for other load-carrying service.
- (4) Wire rope for a crane or derrick that is bent to form an eye shall be equipped with a metal thimble.
- (5) Wire rope that has an independent wire rope core shall be used on all molten metal applications and where the environmental atmosphere in which the rope is used will cause deterioration of a hemp center.
- (6) Wire rope shall be stored in a manner to prevent damage or deterioration.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999.

R 408.41051a

Source: 1995 AACs.

MATERIAL AND PERSONNEL HOISTS (ELEVATORS)

R 408.41065a Material and personnel hoists generally.

Rule 1065a. (1) An employer shall ensure that an employee who is specifically engaged in installing

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personnel elevators or hoists is licensed by the state of Michigan in accordance with Act No. 227 of the Public Acts of 1967 and Act No. 333 of the Public Acts of 1976, being §408.801 et seq. and §338.2151 et seq., respectively, of the Michigan Compiled Laws, and the rules of the department of consumer and industry services relating to elevators.

(2) An employer shall comply with the manufacturer's specifications and limitations applicable to the operation of all material and personnel hoists. If the manufacturer's specifications are not available, then the limitations assigned to the equipment shall be determined by a qualified person who is competent in the field and shall be based on the requirements of ANSI standard A10.4 "Safety Requirements for Personal Hoists and Employee Elevators for Construction and Demolition Operations," 1990 edition and ANSI A10.5 "Safety Requirements for Material Hoists," 1992 edition. A determination shall be documented and recorded. Attachments used shall not exceed the capacity, rating, or scope recommended by the manufacturer.

(3) The employer shall ensure that rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be posted on cars and platforms.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41066a

Source: 1995 AACS.

R 408.41067a

Source: 1995 AACS.

R 408.41068a

Source: 1995 AACS.

R 408.41069a

Source: 1995 AACS.

R 408.41070a

Source: 1995 AACS.

R 408.41070b Material hoists.

Rule 1070b. (1) Operating rules for material hoists shall be established and posted at the operator's station of the hoist. The rules shall include a signal system and the applicable manufacturer's specifications for rated operating speed. Rules and notices shall be posted on the car frame in a conspicuous location and shall include the statement "no riders allowed." A person shall not be allowed to ride on a material hoist, except for inspection and maintenance.

(2) All entrances of the hoistway shall be protected by substantial gates that shall guard the full width of the landing entrance from floor to ceiling. A hoistway entrance gate shall be identified as such.

(3) A gate that protects the entrance to a hoistway shall be equipped with a latching device and be not more than 4 inches from the edge of the landing sill. A gate shall extend a minimum of 6 feet 8 inches above the floor.

(4) An overhead protective covering of 2-inch planking or other solid material of equivalent strength shall be provided on the top of every material hoist cage or platform.

(5) An operator's station of a hoisting machine shall have overhead protection equivalent to tight planking that is not less than 2 inches thick. The support for the overhead protection shall be of equal strength.

(6) A hoist tower may be used with or without enclosures on all sides. However, whichever alternative is chosen, all of the following applicable conditions shall be met:

(a) When a hoist tower is enclosed, it shall be enclosed on all sides for its entire height with a screen enclosure of not more than ½-inch mesh of no. 18 united states gauge wire or equivalent, except for a landing access.

(b) When a hoist tower is not enclosed, the hoist platform or car shall be totally enclosed (caged) on all sides for the full height between the floor and the overhead protective covering with ½-inch mesh of no. 14 united states gauge wire or equivalent. The hoist platform enclosure shall include the required gates for loading

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and unloading. An 8-foot high enclosure shall be provided on the unused sides of the hoist tower at ground level.

(c) In either alternative, the cab or platform shall be enclosed as specified in subdivision (b) of this subrule.

(7) A car safety device shall be installed to function in case of rope failure and shall be tested upon installation and at 4-month intervals.

(8) A material hoist tower shall be designed by a licensed professional engineer.

(9) Wire rope shall be in compliance with the requirements of R 408.1033a and shall be inspected and removed from service if any condition specified in R 408.1013a and R 408.1033a is present.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999.

PERSONNEL HOISTS

R 408.41071a Inspections.

Rule 1071a. (1) Before being put into service, a qualified person shall inspect and test all functions of a personnel hoist. An inspection and test is required after a major alteration of an existing installation. All hoists shall be inspected and tested at not more than 90-day intervals.

(2) An employer shall prepare a certification record that includes all of the following information:

(a) The date of the inspection and test of all functions and safety devices that were performed.

(b) The signature of the person who performed the inspection and tests.

(c) A serial number or other identifier for the hoist that was inspected and tested. The most recent certification record shall be maintained on file on the jobsite.

(3) A load safety test, as required by ANSI standard A10.4 "Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations," 1990 edition, shall be performed on a personnel hoist by a licensed elevator contractor in the presence of a state of Michigan elevator inspector every 90 days.

(4) All control mechanisms shall be inspected daily for misadjustments that might interfere with proper operation and for excessive wear of components.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41072a Personnel hoists generally.

Rule 1072a. (1) The rated load capacities and special hazard warnings or instructions for personnel hoists shall be posted conspicuously on cars and platforms.

(2) A hoist tower outside the structure shall be enclosed for the full height on the side or sides used to enter and exit the structure. At the lowest landing, the enclosure on the sides not used to exit or enter the structure shall be enclosed to a height of not less than 10 feet. Other sides of the tower adjacent to floors or scaffold platforms shall be enclosed to a height of 10 feet above the level of the floors or scaffolds.

(3) A hoistway inside a structure shall be enclosed on all 4 sides throughout the full travel of the hoistway.

(4) A tower shall be anchored to the structure at intervals of not more than 30 feet in height. When tie-ins are not practical, the tower shall be anchored by means of guys which are made of wire rope that is not less than 1/2 of an inch in diameter and which are securely fastened to the anchorage to ensure stability.

(5) Hoistway doors or gates shall be not less than 6 feet 6 inches high, are provided with mechanical locks that cannot be operated from the landing side, and are accessible only to persons on the car.

(6) A car shall be permanently enclosed on all sides and the top, except for sides used for entry and exit and sides that have car gates or doors.

(7) A door or gate shall be provided at each entrance to the car and shall protect the full width and height of the car entrance opening.

(8) An overhead protective covering that consists of 2-inch planking, 3/4-inch plywood, or other solid material of equivalent strength shall be provided on the top of every personnel cab.

(9) Doors or gates shall have electric contacts that do not allow movement of the hoist when a door or gate is open.

(10) A car safety device shall be installed and shall be capable of stopping and holding the car and the rated load when traveling at governor-tripping speed.

(11) A car shall have a capacity and data plate secured in a conspicuous place on the car or crosshead.

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(12) Normal and final terminal stopping devices shall be provided. Final terminal stopping devices shall be installed in the hoistway and shall be mechanically operated.

(13) An emergency stop switch shall be provided in the car and marked "STOP."

(14) A wire rope shall be in compliance with all of the following requirements:

- (a) Not less than 3 hoisting ropes shall be used with traction hoists.
- (b) Hoisting and counterweight wire ropes shall be not less than ½ of an inch in diameter.
- (c) Not less than 2 ropes shall be used for the counterweights on the rack and pinion.
- (d) Safety factors shall be as follows:

MINIMUM FACTORS OF SAFETY FOR SUSPENSION WIRE ROPES

Rope speed in feet per minute	Minimum factor of safety	Rope speed in feet per minute	Minimum factor of safety
50	7.60	250	8.90
75	7.75	300	9.20
100	7.95	350	9.50
125	8.10	400	9.75
150	8.25	450	10.00
175	8.40	500	10.25
200	8.60	550	10.45
225	8.75	600	10.70

(e) The following formula shall be used to calculate the allowable gross load:

$L = \frac{SN}{F}$ L = Allowable gross load

F = Manufacturer's rated breaking strength

N = Number of parts of rope

F = Safety factor

(15) All personnel hoists used by employees shall be constructed of materials and components that are in compliance with the specifications for materials, construction, safety devices, assembly, and structural integrity as stated in ANSI standard A10.4 "Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations," 1990 edition.

(16) Internal combustion engines shall not be permitted for direct drive.

History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41073a

Source: 1995 AACS.

R 408.41074a

Source: 1995 AACS.

R 408.41075a

Source: 1995 AACS.

BASE-MOUNTED DRUM PERSONNEL HOISTS

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R 408.41077a Base-mounted drum hoists.

Rule 1077a. (1) Exposed moving parts on base-mounted hoists, such as gears, projecting screws, setscrews, chain, cables, chain sprockets, and reciprocating or rotating parts, shall be guarded.

(2) All controls used during the normal operating cycle shall be located within easy reach of the operator's station. Electric motor-operated hoists shall have a means to stop remotely operated hoists if the controls are ineffective.

(3) Electric motor-operated hoists shall be equipped with the following items:

(a) A device that will disconnect all motors from the line upon power failure and that will not permit any motor to be restarted until the controller handle is brought to the "off" position.

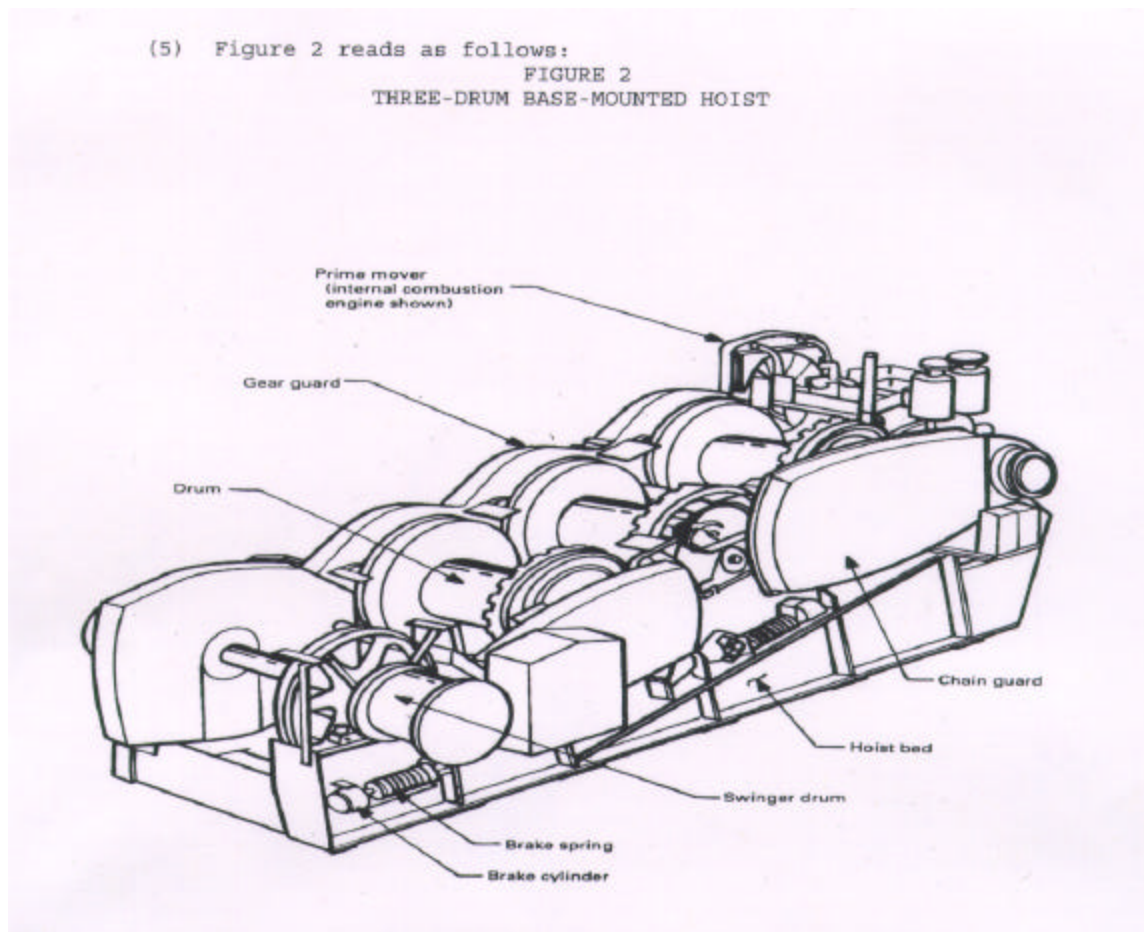
(b) Where applicable, an overspeed-prevention device.

(4) All base-mounted drum hoists in use shall be in compliance with the applicable requirements for design, construction, installation, testing, inspection, maintenance, and operations as prescribed by the manufacturer and applicable ASME standard B30.7 "Base Mounted Drum Hoists," 1994 edition.

(5) Figure 2 reads as follows:

FIGURE 2

THREE-DRUM BASE-MOUNTED HOIST



History: 1995 MR 7, Eff. Aug. 5, 1995; 1999 MR 1, Eff. Feb. 1, 1999; 2000 MR 21, Eff. Jan. 4, 2001.

R 408.41099a

Source: 1995 AACS.

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PART 11. FIXED AND PORTABLE LADDERS

R 408.41101
Source: 1993 AACS.

R 408.41103
Source: 1993 AACS.

R 408.41104
Source: 1993 AACS.

R 408.41105
Source: 1993 AACS.

R 408.41111
Source: 1993 AACS.

R 408.41112
Source: 1993 AACS.

R 408.41113
Source: 1993 AACS.

R 408.41115
Source: 1993 AACS.

R 408.41121
Source: 1993 AACS.

R 408.41122
Source: 1993 AACS.

R 408.41123
Source: 1993 AACS.

R 408.41124
Source: 1993 AACS.

R 408.41125
Source: 1993 AACS.

R 408.41126
Source: 1993 AACS.

R 408.41127
Source: 1996 AACS.

R 408.41128
Source: 1990 AACS.

R 408.41129
Source: 1990 AACS.

R 408.41130
Source: 1990 AACS.

R 408.41131
Source: 1990 AACS.

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R 408.41132

Source: 1990 AACS.

R 408.41133

Source: 1990 AACS.

R 408.41140

Source: 1990 AACS.

PART 12. SCAFFOLDS AND SCAFFOLD PLATFORMS

R 408.41201 Scope.

Rule 1201. This part pertains to scaffolds and scaffold platforms used in construction operations. The equipment may be commercially manufactured or job-built. This part does not apply to crane or derrick suspended personnel platforms as prescribed in R 408.41001a et seq. and R 408.43201 et seq.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41203 Definitions; A to C.

Rule 1203. (1) "Adjustable multipoint suspension scaffold" means a scaffold that has a continuous platform which is supported by bearers suspended by wire rope from overhead supports that is so arranged and operated as to permit the raising or lowering of a platform to desired working positions.

(2) "Bearer," sometimes called a putlog, means a horizontal transverse scaffold member which may be supported by ledgers or runners, upon which the scaffold platform rests, and which joins scaffold uprights, posts, poles, and similar members.

(3) "Boatswain's chair" means a single-point adjustable suspension scaffold that consists of a seat or sling designed to support 1 employee in a sitting position.

(4) "Brace" means a rigid connection that holds 1 scaffold member in a fixed position with respect to another member or that holds 1 scaffold member to a building or structure.

(5) "Bricklayer's square scaffold" means a supported scaffold that is composed of framed squares that support a platform.

(6) "Carpenter's bracket scaffold" means a supported scaffold that consists of a platform supported by brackets attached to a building or structural walls.

(7) "Carriage" means an assembled steel framework which is affixed to a steel tower and which is used to support a work platform.

(8) "Catenary scaffold" means a suspension scaffold consisting of a platform supported by 2 essentially horizontal and parallel ropes attached to structural members of a building or other structure. Additional support may be provided by vertical pickups.

(9) "Chimney hoist" means a multipoint adjustable suspension scaffold used to provide access to work inside chimneys. (See "multipoint suspension scaffold.")

(10) "Cleat" means a structural block used at the end of a platform to prevent the platform from slipping off its supports. Cleats are also used to provide footing on sloped surfaces such as crawling boards.

(11) "Competent person" means a person who is experienced and capable of identifying an existing or potential hazard in surroundings, or under working conditions, that are hazardous or dangerous to an employee and who has the authority and knowledge to take prompt corrective measures to eliminate the hazards.

(12) "Coupler" means a device for locking together the component parts of a tube and coupler scaffold.

(13) "Crawling board," sometimes called a chicken ladder, means a plank that has cleats which are spaced and secured at equal intervals for use by an employee on roofs. A crawling board is not designed to carry any material.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

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R 408.41204 Definitions; D to I.

Rule 1204. (1) "Double pole (independent pole) scaffold" means a supported scaffold that consists of a platform which rests on cross beams (bearers) supported by ledgers and a double row of uprights independent of support, except for ties, guys, and braces, from any structure.

(2) "Equivalent" means alternative designs, materials, or methods to protect against a hazard that the employer can demonstrate will provide an equal or greater degree of safety for employees than the methods, materials, or designs specified in these rules.

(3) "Exposed power lines" means electrical power lines which are accessible to employees and which are not shielded from contact. Exposed power lines do not include extension cords or power tool cords.

(4) "Eye" or "eye splice" means a loop that may have a thimble at the end of a wire rope.

(5) "Fabricated decking and planking" means manufactured platforms that are made of wood, including laminated wood, and solid sawn wood planks, metal, or other materials.

(6) "Failure" means load refusal, breakage, or separation of component parts. Load refusal is the point where the ultimate strength is exceeded.

(7) "Float" or "ship scaffold" means a scaffold which is hung from an overhead support by means of ropes and which consists of a substantial platform that has diagonal bracing underneath and that rests upon, and is securely fastened to, 2 parallel plank bearers at right angles to the span.

(8) "Forklift truck (industrial)" means a self-loading truck which is equipped with a load carriage and forks and which is used for transporting and tiering loads.

(9) "Form scaffold" means a supported scaffold that consists of a platform supported by brackets attached to the formwork.

(10) "Guardrail" means a horizontal barrier that is erected along the exposed sides and ends of a scaffold.

(11) "Heavy-duty scaffold" means a scaffold that is designed and constructed to carry a working load of not more than 75 pounds per square foot.

(12) "Hoist" means a manual or power-operated mechanical device used to raise or lower a suspended scaffold.

(13) "Horse scaffold" means a supported scaffold that consists of a platform supported by construction horses (saw horses). Horse scaffolds constructed of metal are sometimes known as trestle scaffolds.

(14) "Interior hung scaffold" means a suspension scaffold that consists of a platform suspended from the ceiling or roof structure by fixed length supports.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1997 MR 10, Eff. Nov. 6, 1997; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41205 Definitions; L, M.

Rule 1205. (1) "Ladder jack scaffold" means a scaffold that is supported by brackets attached to ladders.

(2) "Ladder safety device" means a device which is installed on a ladder and which, when attached to an employee as prescribed in R 408.44501 et seq., will prevent an accidental fall of the employee.

(3) "Landing" means a platform at the end of a flight of stairs.

(4) "Large area scaffold" means a pole scaffold, tube and coupler scaffold, systems scaffold, or fabricated frame scaffold erected over substantially the entire work area, for example, a scaffold erected over the entire floor area of a room.

(5) "Lean-to scaffold" means a supported scaffold that is kept erect by tilting it toward, and resting it against, a building or structure.

(6) "Ledger" means a horizontal member of a scaffold which extends from post to post and which supports bearers that form a tie between the posts.

(7) "Light-duty scaffold" means a scaffold that is designed and constructed to carry a working load of not more than 25 pounds per square foot.

(8) "Maximum intended load" means the maximum anticipated weight of persons, equipment, material, and scaffold.

(9) "Medium-duty scaffold" means a scaffold that is designed and constructed to carry a working load of not more than 50 pounds per square foot.

(10) "Midrail" means a rail which is located approximately midway between a guardrail and platform and which is secured to uprights erected along the exposed sides and ends of a platform.

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- (11) "Mobile scaffold" means a powered or unpowered portable caster or wheel-mounted supported scaffold.
- (12) "Mobile scaffold tower" means a type of freestanding scaffolding that can be manually moved horizontally from one area to another.
- (13) "Multilevel suspension scaffold" means a scaffold that is manufactured to have 2 or more work platforms which are one above another and which are connected vertically to each other by rigid metal members, all of which are suspended from overhead supports.
- (14) "Multipoint suspended scaffold" means a scaffold that is constructed of rigid steel or wire rope members which suspend and support a work platform. The scaffold can be stationary or the scaffold can be mobile and travel horizontally.
- History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41206 Definitions; N to R.

- Rule 1206. (1) "Needle beam scaffold" means a scaffold that consists of a platform supported by needle beams.
- (2) "Outrigger" means the structural member of a supported scaffold used to increase the base width of a scaffold in order to provide support for, and increased stability of, the scaffold.
- (3) "Outrigger beam (thrustout)" means the structural member of a suspension scaffold or outrigger scaffold that provides support for the scaffold by extending the scaffold point of attachment to a point out and away from the structure or building.
- (4) "Outrigger scaffold" means a platform supported by, and fastened to, outriggers or thrustouts projecting beyond the wall or face of the building or structure, the inboard ends of which are secured inside the building or structure.
- (5) "Platform" means a work surface elevated above lower levels. Platforms can be constructed using individual wood planks, fabricated planks, fabricated decks, and fabricated platforms.
- (6) "Power-operated hoist" means a hoist that is powered by other than human energy.
- (7) "Pump-jack scaffold" means a scaffold for light-duty work that consists of vertical poles, platform planking, and movable brackets for raising or lowering the platform on the vertical poles by a manual pumping action.
- (8) "Qualified person" means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve or resolve problems related to the subject matter, the work, or the project.
- (9) "Rated load" means the manufacturer's specified maximum load to be lifted by a hoist or to be applied to a scaffold or scaffold component.
- (10) "Repair-bracket scaffold" means a supported scaffold that consists of a platform supported by brackets which are secured in place around the circumference or perimeter of a chimney, stack, tank, or other supporting structure by 1 or more wire ropes placed around the supporting structure.
- (11) "Roof bracket scaffold" means a rooftop-supported scaffold that consists of a platform resting on angular-shaped supports.
- (12) "Rough terrain forklift truck" means a wheeled-type truck which is designed primarily as a fork truck that has a vertical mast or pivoted boom, or both, which has variable fixed length reach and which may be equipped with attachments and that is intended for operation on unimproved natural terrain as well as the disturbed terrain of construction sites. A machine that is designed primarily for earth-moving, such as a loader or dozer, even though its buckets and blades are replaced with forks, or a machine that is designed primarily as an over-the-road truck that has a lifting device is not a rough terrain forklift truck.
- (13) "Runner" (ledger or ribbon) means the lengthwise horizontal spacing or bracing member that may support the bearers.
- History: 1979 ACS 7, Eff. June 17, 1981; 1997 MR 10, Eff. Nov. 16, 1997; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41207 Definitions; S.

- Rule 1207. (1) "Scaffold" means a temporary elevated platform which is supported or suspended, including its supporting system and points of anchorage, and which is used for supporting an employee or

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materials, or both.

(2) "Shore scaffold" means a supported scaffold which is placed against a building or structure and which is held in place with props.

(3) "Single-point adjustable suspension scaffold" means a manual or power-operated unit which is supported by a single rope from an overhead support and which is arranged and operated to permit the raising or lowering of the platform to desired working positions.

(4) "Single-pole scaffold" means a type of wood pole scaffold that has a platform which rests on putlogs or cross beams, the outside ends of which are supported on ledgers secured to a single row of posts or uprights and the inner ends of which are supported on or in a wall.

(5) "Stall load" means the load at which the prime mover of a power-operated hoist stalls or the power to the prime mover is automatically disconnected.

(6) "Steel tower" means a vertical assembly of tubular steel post members connected together with welded diagonal and horizontal steel bracing.

(7) "Step, platform, and trestle ladder scaffold" means a platform resting directly on the rungs of step ladders or trestle ladders.

(8) "Stiff arm brace" means a steel horizontal member used to tie a steel tower to a structure to prevent the scaffold from overturning.

(9) "Stilt" means a device which is attached to the leg and foot or shoe of an employee and which is used to elevate the employee from a work surface.

(10) "Supported scaffold" means 1 or more platforms supported by any of the following:

(a) Outrigger beams.

(b) Brackets.

(c) Poles.

(d) Legs.

(e) Uprights.

(f) Posts.

(g) Frames.

(h) Similar rigid support.

(11) "Suspension scaffold" means 1 or more platforms suspended from an overhead structure by ropes or other nonrigid means.

History: 1979 ACS 7, Eff. June 17, 1981; 1999 MR 4, Eff. Apr. 21, 1999.

R 408.41208 Definitions; T to W.

Rule 1208. (1) "Toeboard" means a horizontal barrier that is erected along the exposed edges of an elevated surface to prevent materials, tools, or equipment from falling.

(2) "Tube and coupler scaffold" means a manufactured assembly that consists of all of the following:

(a) Tubing that serves as posts, bearers, braces, ties, and runners.

(b) A brace supporting the post.

(c) Special couplers that serve to connect the uprights and to join the various members.

(d) A work platform.

(3) "Tubular welded frame scaffold" or "fabricated frame scaffold" means a scaffold platform that is supported by a metal sectional frame that consists of posts and a horizontal bearer that has intermediate members.

(4) "Two-point suspension scaffold" or "swing stage" means a suspension scaffold that consists of a platform which is supported by hangers (stirrups) suspended by 2 ropes from overhead supports and which is equipped with means to permit the raising and lowering of the platform to desired work levels.

(5) "Unstable objects" means items whose strength, configuration, or lack of stability may allow them to become dislocated and shift and, therefore, may not properly support the loads imposed on them. Unstable objects do not constitute a safe base support for scaffolds, platforms, or employees. Examples include, but are not limited to, barrels, boxes, loose brick, and concrete blocks.

(6) "Vertical pickup" means a rope used to support the horizontal rope in catenary scaffolds.

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(7) "Window jack scaffold" means a platform which extends through a window opening and which is secured to the structure and supported by braces.

(8) "Working load" means a load that is imposed by persons, materials, and equipment.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41209 Training requirements.

Rule 1209. (1) This rule supplements and clarifies the requirements of R 408.40114(2) of construction safety standard Part 1. General Rules as the rule relates to the hazards of work on scaffolds. An employer shall have each employee who performs work on a scaffold trained by a person qualified in scaffold safety. The training shall enable an employee to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize the hazards. The training shall include the following areas as applicable:

- (a) The nature of any electrical hazards, fall hazards, and falling object hazards in the work area.
- (b) The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used.
- (c) The proper use of the scaffold, and the proper handling of materials on the scaffold.
- (d) The maximum intended load and the load-carrying capacities of the scaffolds used.
- (e) Any other pertinent requirements.

(2) An employer shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by a competent person to recognize any hazards associated with the work in question. The training shall include the following topics, as applicable:

- (a) The nature of scaffold hazards.
- (b) The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold being used.
- (c) The design criteria, maximum intended load-carrying capacity, and intended use of the scaffold.
- (d) Any other pertinent requirements.

(3) If an employer has reason to believe that an employee lacks the skill or understanding needed to safely perform work that involves the erection, use, or dismantling of scaffolds, then the employer shall retrain the employee so that the requisite proficiency is regained.

Retraining is required in all of the following situations:

- (a) Where changes at the worksite present a hazard about which an employee has not been previously trained.
- (b) Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained.
- (c) Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency for the work involved.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41210 Construction and capacity generally.

Rule 1210. (1) A scaffold shall be designed, constructed, erected, and used in accordance with the provisions of this part. A scaffold shall be designed by a qualified person.

(2) A scaffold shall not be erected, moved, dismantled, or altered, except under the supervision of a competent person.

(3) A scaffold and its components shall be capable of supporting, without failure, not less than 4 times the maximum intended load.

(4) A specially designed scaffold that utilizes methods of bracing other than cross bracing is acceptable if the scaffold and its components comply with the requirements of this rule.

(5) A scaffold shall not be loaded to more than the designed working load.

(6) Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift and after any occurrence that could affect a scaffold's structural integrity. Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, or platforms, that is damaged or weakened from any cause shall be immediately repaired or replaced. Any scaffold or accessories that are

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repaired shall have at least the original designed strength of the scaffold or accessory.

(7) An employee on a scaffold who is exposed to an overhead hazard of falling material shall be protected with overhead protection that is sufficient to prevent injury.

(8) All load-carrying wood members of scaffold framing shall be a minimum of 1,500 psi fiber stress value.

(9) All scaffold dimensions are nominal sizes as provided in the American lumber standards, which are adopted by reference in these rules and are available from the West Coast Inspection Bureau, 6990 S.W. Virne Road, P.O. Box 23145, Portland, Oregon 97223, or from the Michigan Department of Consumer and Industry Services, MIOSHA Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at a cost of \$9.50. However, where rough sizes are noted, only rough or undressed lumber of the size specified will satisfy the minimum requirement of that standard.

(10) The poles, legs, or uprights of scaffolds shall be plumb and shall be securely and rigidly braced to prevent swaying and displacement.

(11) The support for a scaffold shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Leveling jack adjusting screws, when used, shall not extend more than 18 inches below the base of the scaffold. Unstable objects, such as barrels, boxes, pallets, brick, or concrete blocks, shall not be used to support a scaffold or work platform. Scaffold poles, legs, posts, frames, and uprights shall bear on base plates and mud sills or other adequate firm foundation.

(12) Scaffold components that are not designed to be compatible shall not be intermixed.

(13) A shore or lean-to scaffold shall not be used.

(14) Makeshift devices, such as, but not limited to, boxes and barrels, shall not be used on top of scaffold platforms to increase the working level height of employees.

(15) A ladder shall not be used on a scaffold to increase the working level height of employees, except on a large area scaffold where an employer has satisfied all of the following criteria:

(a) When the ladder is placed against a structure that is not a part of the scaffold, the scaffold shall be secured against the sideways thrust exerted by the ladder.

(b) The platform units shall be secured to the scaffold to prevent the units from moving.

(c) Either the ladder legs shall be on the same platform or another means shall be provided to stabilize the ladder against unequal platform deflection.

(d) The ladder legs shall be secured to prevent them from slipping or being pushed off the platform.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41211 Access to scaffold platforms.

Rule 1211. (1) Access to a scaffold platform shall be provided by 1 or more of the following:

(a) A ladder that conforms to R 408.41101 et seq.

(b) Hook-on or attachable metal ladders that are specifically designed for use in construction with manufactured types of scaffolds. If hook-on or attachable metal ladders are used as access to, or egress from, a work platform that is more than 35 feet above the ground or floor level, then a ladder safety device shall be installed or the ladders shall be offset with landing platforms and guardrails that are installed at not more than 35-foot intervals.

(c) Step or hook-on, stair-type accessories that are specifically designed for use with appropriate types of scaffolds.

(d) Direct access from an adjacent scaffold, the structure, or personnel hoist. The direct access to or from another surface shall be used only when the scaffold is not more than 14 inches (36 cm) horizontally and not more than 24 inches (61 cm) vertically from the other surface.

(e) A ramp, runway, or stairway that conforms to R 408.42121 et seq.

(2) The intermediate horizontal members of the frame of a manufactured tubular welded frame scaffold may be used instead of a ladder or stairway for access to, and egress from, the work platform, if all of the following conditions are met:

(a) All the frames and component parts are compatible in design.

(b) The intermediate horizontal members of a frame are a minimum of 11½ inches in length.

(c) The horizontal members of each frame shall be uniformly spaced and shall not be more than 18 inches center to center vertically.

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- (d) When frames are connected vertically to one another, the distance between the bottom horizontal member of the upper end frame and the top horizontal member of the lower end frame shall be within 3 inches of the uniform spacing of the horizontal members of each frame.
 - (e) The elevation to the lowest horizontal member of the bottom frame shall not be more than 24 inches from the ground or floor.
 - (f) Each horizontal member shall be capable of supporting 300 pounds applied at its midpoint without bending or cracking.
 - (g) Each horizontal member shall be inspected for, and found free of, cracks, bends, or bad welds. Cracks, bends, or bad welds shall be corrected.
 - (h) Only 1 employee at a time shall use a horizontal member of a frame as access to, or egress from, the workstation.
 - (i) Cross braces shall not be used as a means of access.
 - (3) The guardrail system located on the side where horizontal members of the scaffold frame are used for access to, or egress from, a work platform shall be constructed as follows:
 - (a) The intermediate rail shall be omitted between the corner posts at the access location.
 - (b) The top rail shall be continuous between posts. A scaffold and its components shall be capable of supporting, without failure, not less than 4 times the maximum intended load.
 - (4) The overhang of a work platform shall not interfere with an employee accessing or leaving a work platform.
 - (5) If horizontal members of scaffold frames are used as access to, or egress from, a work platform which is more than 35 feet above ground or floor level, a ladder safety device shall be installed and used or the horizontal members shall be offset with landing platforms and guardrails that are installed at not more than 30-foot intervals.
 - (6) Steps and rungs of ladder and stairway-type access shall line up vertically with each other between rest platforms.
 - (7) All of the following provisions apply to erecting or dismantling a scaffold:
 - (a) An employer shall provide a safe means of access for each employee erecting or dismantling a scaffold if providing safe access is feasible and does not create a greater hazard. The employer shall have a competent person determine whether it is feasible or would pose a greater hazard to provide, and have employees use, a safe means of access. The determination shall be based on site conditions and the type of scaffold being erected or dismantled.
 - (b) Hook-on or attachable ladders shall be installed as soon as scaffold erection has progressed to a point that permits safe installation and use.
 - (c) When erecting or dismantling tubular welded frame scaffolds, endframes, that have horizontal members which are parallel, level, and not more than 22 inches apart vertically as climbing devices for access, the employer shall ensure that the tubular welded frame scaffolds are erected in a manner that creates a usable ladder and provides a good handhold and foot space.
 - (d) Cross braces on tubular welded frame scaffolds shall not be used as a means of access or egress.
- History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41212 Accumulation of tools, material, or debris prohibited; weather conditions; slippery conditions; electrical hazards; rope protection; fall protection.

- Rule 1212. (1) Excess tools, materials, and debris shall not be permitted to accumulate on a scaffold to create a hazard.
- (2) Work on or from scaffolds is prohibited during storms or high winds unless a competent person has determined that it is safe for employees to be on a scaffold and that the employees are protected by a personal fall arrest system. Wind screens shall not be used unless the scaffold is secured against the anticipated wind forces imposed.
 - (3) A scaffold shall be kept free of slippery conditions such as those caused by ice, snow, oil, grease, or other slippery compounds.
 - (4) An employee shall not be allowed within 10 feet of uninsulated electrical energized lines.
 - (5) Before a scaffold is erected within 10 feet of an electrical line, the utility or property owner shall be

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consulted. An electrical line or electrical apparatus shall be considered energized unless the property owner or utility indicates it is de-energized and the line or apparatus is visibly grounded. If de-energizing is impractical and the equipment is exposed to contact by an employee, the minimum clearances set forth in table 1 shall be maintained between the scaffold, employee, or material, whichever is closer. The requirements for employees performing power transmission and distribution work, electrical work, or telecommunications work are found in construction safety standard Part 16. Power Transmission and Distribution, Part 17. Electrical Installations, and Part 30. Telecommunications, being R 408.41601 et seq., R 408.41701 et seq., and R 408.43001 et seq., respectively, of the Michigan Administrative Code.

(6) Table 1 reads as follows:

TABLE 1

VOLTAGE	INSULATED LINES MINIMUM DISTANCE	ALTERNATIVES
Less than 300 volts	3 feet (0.9 meters)	2 times the length of the line insulator, but not less than 10 feet (3.1 meters)
300 volts to 50 kilovolts	10 feet (3.1 meters)	
More than 50 kilovolts	10 feet (3.1 meters) plus 0.4 inches (1.0 centimeter) for each kilovolt over 5	

VOLTAGE	UNINSULATED LINES MINIMUM DISTANCE	ALTERNATIVES
Less than 50 kilovolts	10 feet (3.1 meters)	2 times the length of the line insulator, but not less than 10 feet (3.1 meters)
More than 50 kilovolts	10 feet (3.1 meters) plus 0.4 inches (1.0 centimeter) for each kilovolt over 5	

(7) Welding, burning, riveting, or open flame work shall not be performed within 10 feet of fiber or synthetic rope that is used to suspend a scaffold, unless the rope is protected from sparks, flame, or hot metal. Only treated or protected fiber or synthetic ropes shall be used for or near any work that involves the use of corrosive substances or chemicals.

(8) A suspension rope, including connecting hardware, used on nonadjustable or adjustable suspension scaffolds shall be capable of supporting, without failure, not less than 6 times the maximum intended load applied or transmitted to the rope.

(9) If personal fall arrest systems are required by these rules for the protection of employees, then the arrest system equipment shall be as prescribed in R 408.44501 et seq.

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(10) To reduce the possibility of welding current arcing through the suspension wire rope when performing welding from suspended scaffolds, a welder shall take the following precautions, as applicable:

(a) An insulated thimble shall be used to attach each suspension wire rope to its hanging support, such as a cornice hook or outrigger. Excess suspension wire rope and any additional independent lines from grounding shall be insulated.

(b) The suspension wire rope shall be covered with insulating material extending not less than 4 feet (1.2 meters) above the hoist. If there is a tail line below the hoist, it shall be insulated to prevent contact with the platform. The position of the tail line that hangs free below the scaffold shall be guided or retained, or both, so that it does not become grounded.

(c) Each hoist shall be covered with insulated protective covers.

(d) In addition to a work lead attachment required by the welding process, a grounding conductor shall be connected from the scaffold to the structure. The size of the conductor shall be at least the size of the welding process work lead, and the conductor shall not be in series with the welding process or the workpiece.

(e) If the scaffold grounding lead is disconnected, the welding machine shall be shut off.

(f) An active welding rod or uninsulated welding lead shall not be allowed to contact the scaffold or its suspension system.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41213 Guardrails; fall arrest devices.

Rule 1213. (1) A guardrail shall be installed on any open side or end of a scaffold work platform that is 10 (3.1 meters) or more feet above the floor or ground, except for any of the following:

(a) A boatswain's chair.

(b) A catenary scaffold.

(c) A float scaffold.

(d) A ladder jack scaffold.

(e) A needle beam scaffold. The guardrail shall be as prescribed in R 408.42150.

(2) An employee on a boatswain's chair, catenary scaffold, float scaffold, needle beam scaffold, or ladder jack scaffold shall be protected by a personal fall arrest system. An employee on a single-point or 2-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and guardrail system.

(3) A personal fall arrest device as prescribed in R 408.44502 shall be worn and attached to a substantial portion of a scaffold when the work platform of an adjustable suspension scaffold that has overhead protection is 10 (3.1 meters) or more feet above the floor, water, or ground. Separate safety lines shall be attached to a substantial portion of the structure above and to the scaffold by an approved fall prevention device in a manner to prevent the scaffold from falling more than 12 inches if the scaffold suspension system fails.

(4) A top rail or an intermediate rail may be eliminated if the configuration of the scaffold and the material deck provides equivalent protection against an employee falling from the platform or if a personal fall arrest device is worn.

(5) A cross brace may be used as part of the guardrail system as follows:

(a) If the pivot point occurs from 36 inches to 48 inches above the platform, then a midrail shall be added midway between the platform and the brace pivot point.

(b) If the pivot point occurs from 18 inches above the platform, then a top rail shall be added.

(c) If the pivot point occurs less than 18 inches or more than 48 inches above the platform, then both a top rail and midrail shall be provided.

(6) An employer shall have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. An employer is required to provide fall protection for employees erecting or dismantling supported scaffolds where the installation and use of the protection is feasible and does not create a greater hazard.

(7) If vertical lifelines are used, then they shall be fastened to a fixed safe point of anchorage and shall be protected from sharp edges and abrasion. Safe points of anchorage include structural members of buildings, but do not include any of the following:

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- (a) Standpipes.
- (b) Vents.
- (c) Other piping systems.
- (d) Electrical conduit.
- (e) Outrigger beams.
- (f) Counterweights.

(8) If horizontal lifelines are used, they shall be secured to 2 or more structural members of the scaffold or may be looped around both suspension and independent support lines equal in number to the number of points supported and equivalent in strength to the strength of the suspension ropes. Independent support lines and suspension ropes shall not be attached to the same points of anchorage.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41214 Hoisting machines generally.

Rule 1214. (1) A hoisting machine shall carry a label of an approved nationally recognized testing laboratory, such as underwriters laboratories or factory mutual engineering corporation, which states that the machine is approved for use on a suspension scaffold, swinging scaffold, or powered mobile elevating platform.

(2) If wire rope is used to suspend an adjustable scaffold, then the rope shall be in compliance with all of the following requirements.

(a) Have the fixed end equipped with a proper size thimble and attached to the upper support member.

(b) Have the running rope securely attached to the hoisting drum and have not less than 4 wraps of the rope remain on the drum at all times.

(c) When other types of hoists are used, either the suspension ropes shall be long enough to allow the scaffold to be lowered to the level below without the rope end passing through the hoist or the rope end shall be configured or provided with means to prevent the end from passing through the hoist.

(3) A hoisting machine shall be inspected daily when in use and shall not be put in service unless it is free of defects which would affect the operation of the machine.

(4) The stall load of any scaffold hoist shall not be more than 3 times its rated load.

History: 1979 ACS 7, Eff. June 17, 1981; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41215

Source: 1981 AACS.

R 408.41216

Source: 1981 AACS.

R 408.41217 Planking and scaffold platforms generally.

Rule 1217. (1) If wood planks are used for a work platform, then the planks shall be scaffold-grade lumber that has a minimum of 1,500 pounds per square inch fiber stress value. The planks shall be not less than 2 inches by 10 inches. The platform shall consist of a minimum of 2 planks laid side by side. Each platform on all working levels of scaffolds shall be fully planked or decked between uprights where practicable. Spaces between the platform and the uprights shall not be more than 9½ inches. The maximum permissible spans for 2- by 10-inch or wider planks are as follows:

	Material full thickness undressed lumber				Material nominal thickness lumber			
Working load (per square foot)	25	50	62	75	25	37	50	62
Permissible span (feet)	10	8	7	6	8	7	6	4

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- (2) Laminated planks shall meet or exceed the load requirement of regular planking.
 - (3) A manufactured work platform shall be tested and listed by an approved nationally recognized testing laboratory.
 - (4) Wood scaffold planks, laminated planks, manufactured work platforms, and picks that are found to be defective shall be removed from service and shall not be used.
 - (5) A manufactured pick shall be permanently marked or tagged to indicate the maximum working load and shall not be less than 14 inches wide when used in single width, except that a ladder jack scaffold may be used with a minimum 12-inch manufactured pick.
 - (6) Platform planks shall be laid with their edges together so the platform is tight and does not have spaces through which tools or fragments of materials can fall.
 - (7) Planking shall be in compliance with all of the following provisions:
 - (a) Extend over the end bearer not less than 6 inches, but not more than 12 inches.
 - (b) Be cleated or otherwise fastened to prevent shifting and be uniform in thickness, except where lapped as prescribed in subrule (10) of this rule.
 - (c) Where 16-foot planks are used as prescribed in subrule (9) of this rule, tie downs are not required unless wind uplift may occur.
 - (8) Hook-on-type manufactured work platforms may be used if they are secured to the bearer.
 - (9) Where planks are lapped, each plank shall lap its bearer not less than 6 inches, which will provide a minimum overlap of 12 inches.
 - (10) Where a scaffold turns a corner, the planks shall be laid to prevent tipping. The planks that meet the corner bearer at an angle shall be laid first and shall extend over the diagonally placed bearer far enough to have a good bearing, but not far enough to tip. The planks that run in the different direction shall be laid so as to extend over the rest on the first layer of planks.
 - (11) When moving a platform to the next level, an employee shall leave the old platform undisturbed until the new platform supports have been set in place and are ready to receive the platform planks.
 - (12) When a scaffold is occupied by an employee, a slippery condition that occurs on the scaffold platform shall be eliminated as soon as possible after the condition occurs.
 - (13) A platform shall not deflect more than 1/60 of the span when loaded.
 - (14) A wood platform shall not be covered with opaque finishes, except that platform edges may be covered or marked for identification. A platform may be coated periodically with wood preservatives, fire-retardant finishes, and slip-resistant finishes; however, the coating may not obscure the top or bottom wood surfaces.
 - (15) The front of a platform shall be not more than 14 inches from the face of the work unless a guardrail system is erected along the front edge or unless a personal fall arrest system is used as set forth in R 408.44501 et seq., except that the maximum distance from the face of the work for plastering and lathing operations shall be not more than 18 inches.
- History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41218

Source: 1981 AACS.

R 408.41219 Protection from falling objects.

- Rule 1219. (1) In addition to wearing a hard hat, an employee on a scaffold shall be provided with additional protection from falling hand tools, debris, and other small objects through the installation of toeboards, screens, or guardrail systems or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects. If the falling objects are too large or heavy to be contained or deflected by any of the measures specified in this subrule, then the employer shall place the potential falling objects away from the edge of the surface from which they could fall and shall secure the objects as necessary to prevent them from falling.
- (2) If there is a danger of tools, materials, or equipment falling from a scaffold and striking employees below, then all of the following provisions apply:
 - (a) The area below the scaffold to which objects can fall shall be barricaded and employees shall not be

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permitted to enter the hazard area.

(b) A toeboard shall be erected along the edge of a platform that is more than 10 feet (3.1 meters) above lower levels. The toeboard shall span a distance sufficient to protect employees below, except on a float (ship) scaffold, where an edging of (3/4-inch by 1½-inch (2- by 4-centimeters) wood or equivalent may be used in place of a toeboard.

(c) If tools, materials, or equipment are piled to a height higher than the top edge of the toeboard, then paneling or screening extending from the toeboard or platform to the top of the guardrail shall be erected for a distance sufficient to protect employees below.

(d) A guardrail system shall be installed with openings small enough to prevent the passage of potential falling objects.

(e) A canopy structure, debris net, or catch platform that is strong enough to withstand the impact forces of potential falling objects shall be erected over the employees below.

(3) Canopies, when used for falling object protection, shall be in compliance with all of the following criteria as applicable:

(a) A canopy shall be installed between the falling object hazard and employees.

(b) If a canopy is used on a suspension scaffold for falling object protection, then the scaffold shall be equipped with additional independent support lines equal in number to the number of points supported and equivalent in strength to the strength of the suspension ropes.

(c) Independent support lines and suspension ropes shall not be attached to the same points of anchorage.

(4) If used, toeboards shall be in compliance with both of the following provisions:

(a) Be capable of withstanding, without failure, a force of not less than 50 pounds (222 nano) applied in any downward or horizontal direction at any point along the toeboard.

(b) Be not less than 3½ inches (9 centimeters) high from the top edge of the toeboard to the level of the walking/working surface. A toeboard shall be securely fastened in place at the outermost edge of the platform and have not more than 1/4 inch (0.7 centimeter) of clearance above the walking/working surface. A toeboard shall be solid or have openings of not more than 1 inch (2.5 centimeter) in the greatest dimension.

History: 1999 Mr 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

FLOOR AND GROUND SUPPORTED SCAFFOLDS

R 408.41221 Stilts.

Rule 1221. (1) A stilt shall be constructed in accordance with all of the following provisions:

(a) It shall be able to support 4 times the intended load.

(b) It shall have a bottom base plate which is not less than 3 1/2 inches by 5 1/2 inches and which is equipped with rubber pads.

(c) It shall be not more than 20 inches in height from the bottom of the base plate to the foot support.

(d) It shall be made of metal and remain unpainted.

(e) It shall be made by a manufacturer of stilts.

(2) A stilt shall be inspected for damage, wear, and corrosion. A defective stilt, including the pins and straps, shall be repaired or replaced before being placed in use.

(3) A stilt shall be kept clean and free of accumulations of paint, plaster, and other debris.

(4) Stilts shall be used only if all of the following conditions exist:

(a) Floors are level.

(b) All floor holes are securely covered.

(c) When an employee is using stilts, the top edge height of the top rail, or equivalent member, shall be increased an amount equal to the height of the stilts.

(d) The floor is capable of supporting a load on the stilt's base plate without deformation of more than 1/4 of an inch.

(e) The floor is cleared of debris, materials, or liquids that could cause a slipping or tripping hazard.

(5) An employee who is wearing stilts shall not support, lift, or hold a weight of more than 20 pounds.

(6) Stilts shall not be used while going from one level to another.

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(7) An employee may wear stilts on a scaffold only if it is a large area scaffold.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41222

Source: 1981 AACS.

R 408.41223 Tube and coupler scaffolds.

Rule 1223. (1) A tube and coupler scaffold shall have all posts, bearers, runners, and bracing of not less than a nominal 2-inch (1.90 inches outside dimension) steel tubing or equivalent.

(2) The material used for couplers shall be of a structural type, such as a drop-forged steel, malleable iron, or structural grade aluminum. Dissimilar metals shall not be used.

(3) The posts of a tube and coupler scaffold shall not be spaced more than 6 feet apart in width and not more than 10 feet along the length for a light-duty rated scaffold, 8 feet along the length for a medium-duty rated scaffold, and 6 feet along the length for a heavy-duty rated scaffold.

(4) Drawings and specifications for a tube and coupler scaffold over 125 feet in height above the base plate shall be designed by a qualified engineer who is knowledgeable in scaffolding. Drawings and specifications shall be readily available at the jobsite. A scaffold that is less than 125 feet in height shall conform to the requirements of table 3.

(5) Runners shall be erected along the length of the scaffold and located on both the inside and the outside posts at even heights. When tube and coupler guardrails and midrails are used on outside posts, they may be used in place of outside runners. Runners shall be interlocked to form a continuous length and coupled to each post. The bottom runner shall be located as close to the base as possible. The runners shall be placed not more than 6 feet 6 inches on centers.

(6) A bearer shall be installed transversely between posts and shall be securely coupled either to a post bearing on a runner coupler or directly to a runner and shall be kept as close to the post as possible.

(7) A bearer shall be not less than 4 inches, but not more than 12 inches, longer than the post spacing or runner spacing. A bearer may be cantilevered for use as brackets to carry 2 2-inch by 10-inch planks. The bearer for a cantilevered section shall be not more than 24 inches and the section shall be limited to 25 pounds per square foot.

(8) Cross bracing shall be installed across the width of the scaffold at both ends and at least every third set of posts horizontally and every fourth runner vertically. The bracing shall extend diagonally from the inner and outer runners upward to the next outer and inner runners.

(9) Longitudinal diagonal bracing on the outer rows of poles shall be installed at a 45-degree angle from near the base of the first outer post upward to the extreme top of the scaffold. Where the longitudinal length of the scaffold permits, the bracing shall be duplicated beginning at every fifth post. In a similar manner, longitudinal diagonal bracing shall also be installed from the last post extending back and upward toward the first post. Where conditions preclude the attachment of this bracing to the posts, it may be attached to the runners.

(10) Guys, ties, and braces shall be installed according to the scaffold manufacturer's recommendations or at the closest horizontal member to the 4 to 1 ratio height and be repeated vertically at locations of horizontal members every 20 feet (6.1 meters) or less thereafter for a scaffold 3 feet (0.91 meters) wide or less and every 26 feet (7.9 meters) or less thereafter for a scaffold more than 3 feet (0.9 meters) wide. The top guy, tie, or brace of a completed scaffold shall be placed no further than a 4 to 1 ratio from the top. The top guys, ties, and braces shall be installed at each end of the scaffold and at horizontal intervals of not more than 30 feet (9.1 meters), measured from 1 end, not both, towards the other end. Outriggers, when used, may be considered a part of the base dimension. The outriggers shall be installed on both sides of the scaffold at each frame line.

(11) Table 3 reads as follows:

TABLE 3
TUBE AND COUPLER SCAFFOLDS

	LIGHT DUTY	MEDIUM	HEAVY
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Maximum uniformly distributed Load	25 pounds per square foot	50 pounds per square foot	75 pounds per square foot
Post spacing (longitudinal)	10 feet	8 feet	6 feet
Post spacing (transverse)	6 feet	6 feet	6 feet
Work levels	1 2 3	1 2	1
Maximum allowable additional planked levels	8 4 0	6 0	6
Maximum height (feet)	125 125 91	125 75	125

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41224 Tubular welded frame scaffolds (fabricated frame scaffold).

Rule 1224. (1) The spacing of frames of a tubular welded frame scaffold shall be consistent with the provisions of R 408.41223(3).

(2) The scaffold shall be braced by cross bracing or diagonal braces, or both, for securing vertical members together laterally. The cross braces shall be of sufficient length so that the erected scaffold is always plumb, square, and rigid. All brace connections shall be made secure.

(3) The frames shall be placed one on top of the other with coupling or stacking pins to provide proper vertical alignment of the legs.

(4) Where uplift may occur, frames shall be locked together vertically by pins or other equivalent suitable means.

(5) A guy, tie, and brace shall be installed according to the scaffold manufacturer's recommendations or at the closest horizontal member to the 4 to 1 ratio height and be repeated vertically at locations of horizontal members every 20 feet (6.1 meters) or less thereafter for a scaffold 3 feet (0.91 meters) wide or less and every 26 feet (7.9 meters) or less thereafter for a scaffold more than 3 feet (0.91 meters) wide. The top guy, tie, or brace of a completed scaffold shall be placed no further than a 4 to 1 ratio height from the top. A guy, tie, and brace shall be installed at each end of the scaffold and at horizontal intervals of not more than 30 feet (9.1 meters) measured from one end, not both, towards the other. Outriggers, when used, may be considered as part of the base dimension when installed on each corner of the long side at intervals of not more than 20 feet.

(6) Drawings and specifications for all tubular welded frame scaffolds over 125 feet in height above the base plates shall be designed by a qualified engineer who is knowledgeable in scaffolding. The plans shall be available at the jobsite.

(7) Brackets used to support cantilevered loads shall be in compliance with all of the following provisions:

(a) Be seated with side brackets parallel to the frames and end brackets at 90 degrees to the frames.

(b) Not be bent or twisted from the positions specified in subdivision (a) of this subrule.

(c) Be used only to support personnel, unless the scaffold has been designed for other loads by a qualified engineer and built to withstand the tipping forces caused by the other loads being placed on the bracket-supported section of the scaffold.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41225

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Source: 1981 AACCS.

R 408.41226

Source: 1981 AACCS.

R 408.41227 Pump jack scaffolds.

Rule 1227. (1) Pump jack brackets, braces, and accessories shall be fabricated from metal plates and angles. Each bracket shall have 2 positive gripping mechanisms to prevent any failure or slippage.

(2) The platform bracket shall be fully decked.

(3) Poles that are used for a pump jack shall not be spaced more than 10 feet center to center when wood scaffold planks are used for a platform. The spacing may be more than 10 feet center to center if a manufactured platform meets the requirements of this part.

(4) A pole shall be in compliance with all of the following provisions:

(a) Not be more than 30 feet in height.

(b) Be secured to the structure by rigid triangular bracing, or equivalent, at the bottom, top, and other points as necessary to provide a maximum vertical spacing of not more than 10 feet between braces. Each brace shall be capable of supporting not less than 225 pounds tension or compression.

(c) Be made of 2 2 by 4s of Douglas fir, or the equivalent, or 2 continuous lengths made of 2 by 4s spiked together, with the seam parallel to the bracket, with 10D common nails at not more than 12 inches center to center, staggered uniformly from opposite outside edges. Each 2 by 4 may be spliced to make up a pole if the splice is constructed to develop the full strength of the member.

(5) Where the bracket must pass bracing already installed, an extra brace shall be used approximately 4 feet above the one to be passed until the original brace is reinstalled.

(6) Occupancy of a pump-jack scaffold shall be limited to 2 employees between any 2 adjacent supports.

(7) If poles are made of wood, then the pole lumber shall be straight-grained and free of shakes, large loose or dead knots, and other defects that might impair strength.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41228

Source: 1981 AACCS.

R 408.41229 Suspended scaffolds; tipping moment requirement; support devices; outrigger beams; counterweights tiebacks; suspension ropes; use of certain equipment on scaffolds prohibited; securing scaffolds; use of emergency escape and rescue devices.

Rule 1229. (1) Direct connections to roofs and floors, and counterweights used to balance an adjustable suspension scaffold, shall be capable of resisting not less than 4 times the tipping moment imposed by the scaffold operating at either the rated load of the hoist or not less than 1.5 times the tipping moment imposed by the scaffold operating at the stall load of the hoist, whichever is greater.

(2) A suspension scaffold support device, such as an outrigger beam, cornice hook, parapet clamp, and a similar device shall rest on a surface capable of supporting not less than 4 times the load imposed on them by the scaffold operating at the rated load of the hoist or not less than 1.5 times the load imposed on them by the scaffold at the stall capacity of the hoist, whichever is greater.

(3) A suspension scaffold outrigger beam, when used, shall be made of structural metal or equivalent strength material and shall be restrained to prevent movement.

(4) The inboard end of a suspension scaffold outrigger beam shall be stabilized by bolts or other direct connection to the floor or roof deck or shall be stabilized by counterweights, except that a multipoint adjustable suspension scaffold outrigger beam shall not be stabilized by counterweights.

(5) Before a scaffold is used, a competent person shall evaluate direct connections. The person shall confirm, based on the evaluation, that the support surfaces are capable of supporting the loads to be imposed. In addition, an engineer who is experienced in multipoint adjustable suspension scaffold design shall design the multipoint adjustable suspension scaffold connections.

(6) Counterweights shall be made of nonflowable material. Sand, gravel, and similar materials that can be easily dislocated shall not be used as counterweights.

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- (7) Only items specifically designed as counterweights shall be used to counterweight scaffold systems. Construction materials, such as, but not limited to, masonry units and rolls of roofing felt, shall not be used as counterweights.
- (8) Counterweights shall be secured by mechanical means to the outrigger beams to prevent accidental displacement.
- (9) Counterweights shall not be removed from an outrigger beam until the scaffold is disassembled.
- (10) Outrigger beams that are not stabilized by bolts or other direct connections to the floor or roof deck shall be secured by tiebacks.
- (11) Tiebacks shall be equivalent in strength to the suspension ropes.
- (12) An outrigger beam shall be placed perpendicular to its bearing support, usually the face of the building or structure. However, if an employer can demonstrate that it is not possible to place an outrigger beam perpendicular to the face of the building or structure because of obstructions that cannot be moved, then the outrigger beam may be placed at some other angle if opposing angle tiebacks are used.
- (13) Tiebacks shall be secured to a structurally sound anchorage on the building or structure. Sound anchorages include structural members, but do not include any of the following items:
 - (a) Standpipes.
 - (b) Vents.
 - (c) Other piping systems.
 - (d) Electrical conduit.
- (14) Either tiebacks shall be installed perpendicular to the face of the building or structure or opposing angle tiebacks shall be installed. Single tiebacks installed at an angle are prohibited.
- (15) A suspension scaffold outrigger beam shall be in compliance with all of the following provisions:
 - (a) Have stop bolts or shackles at both ends.
 - (b) Be securely fastened together with the flanges turned out when channel iron beams are used in place of I-beams.
 - (c) Be installed with all bearing supports perpendicular to the beam center line.
 - (d) Be set and maintained with the web in a vertical position.
 - (e) When an outrigger beam is used, the shackle or clevis with which the rope is attached to the outrigger beam shall be placed directly over the center line of the stirrup.
- (16) A suspension scaffold support device, such as a cornice hook, roof hook, roof iron, parapet clamp, or similar device shall be in compliance with the following provisions, as applicable:
 - (a) Be made of steel, wrought iron, or materials of equivalent strength.
 - (b) Be supported by bearing blocks.
 - (c) Either be secured against movement by tiebacks installed at right angles to the face of the building or structure or have opposing angle tiebacks installed and secured to a structurally sound point of anchorage on the building or structure. Sound points of anchorage include structural members, but do not include any of the following items:
 - (i) Standpipes.
 - (ii) Vents.
 - (iii) Other piping systems.
 - (iv) Electrical conduit.
 - (d) Tiebacks shall be equivalent in strength to the hoisting rope.
- (17) A suspension rope that supports an adjustable suspension scaffold shall be of a diameter large enough to provide sufficient surface area for the functioning of brake and hoist mechanisms.
- (18) Repaired wire rope shall not be used as suspension rope.
- (19) Wire suspension ropes shall not be joined together, except through the use of eye splice thimbles connected with shackles or cover plates and bolts.
- (20) Swaged attachments or spliced eyes on wire suspension ropes shall not be used unless the attachments or eyes are made by the wire rope manufacturer or a qualified person.
- (21) The load end of a wire suspension rope shall be equipped with proper size thimble and shall be secured by eye splicing or an equivalent means.
- (22) Gasoline-powered equipment and hoists shall not be used on suspension scaffolds.
- (23) A suspension scaffold shall be tied or otherwise secured to prevent it from swaying. A competent person

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shall evaluate the scaffold and determine if it needs to be tied or otherwise secured. Window cleaner's anchors shall not be used to tie or otherwise secure a suspension scaffold.

(24) A device that functions solely to provide emergency escape and rescue shall not be used as a working platform. This subrule does not preclude the use of a system that is designed to function both as a suspension scaffold and an emergency system.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

SUSPENDED SCAFFOLDS

R 408.41231 Adjustable multipoint suspension scaffolds.

Rule 1231. (1) An adjustable multipoint suspension scaffold shall be capable of sustaining a working load of 50 pounds per square foot and shall not be loaded to more than 50 pounds per square inch.

(2) An outrigger beam that is used for an adjustable multipoint suspension scaffold shall meet all of the following criteria:

(a) Be made of metal that is equivalent in strength to a standard 7-inch, 15.3-pound steel beam.

(b) Be not less than 15 feet in length.

(c) Project not more than 6 feet 6 inches beyond the bearing point.

(d) Be spaced not more than 7 feet on center.

(3) The scaffold outrigger beam shall be securely fastened or anchored to the frame or floor system of the building or structure.

(4) Only wire rope shall be used for suspending an adjustable multipoint suspension scaffold.

(5) The steel shackles or clevises with which the wire ropes are attached to the outrigger beams shall be placed directly over the hoisting drums.

(6) The outrigger beam shall rest on a wood bearing block that is capable of supporting the load without deformation.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41232

Source: 1990 AACS.

R 408.41233 Two-point adjustable suspension scaffolds (swing stage scaffold).

Rule 1233. (1) A swing stage scaffold platform shall not be less than 20 inches nor more than 36 inches wide overall. The platform shall be securely fastened to the stirrups by U-bolts or by other equivalent means.

(2) At the beginning of each new installation, after a swing stage scaffold is completely suspended, the scaffold shall be tested by being set about 1 foot above the lowest elevation and loaded with 2 times the anticipated working load.

(3) The stirrups shall be designed with a support for a guardrail, intermediate rails, and toeboard.

(4) Rope and blocks that are used to support a 2-point adjustable scaffold shall have all of the following:

(a) Supporting ropes of 3/4-inch, first-quality manila rope or a synthetic rope of equivalent strength used with at least one 6-inch single and one 6-inch double block.

(b) Blocks that have sheaves which fit the size of the rope the blocks carry.

(c) Live ropes made fast to the scaffold in a manner to prevent displacement.

(d) The dead-end of the supporting rope connected to the block at the stirrup by means of an eye splice incorporating a thimble.

(5) Slings, hangers, platforms, and other supporting parts shall be inspected before every installation. Periodic inspections shall be made while the scaffold is in use. For wire ropes, see R 408.41261.

(6) A swing stage scaffold shall be limited to the following number of employees:

(a) For a scaffold designed for a working load of 500 pounds, not more than 2 employees shall be permitted to work at one time.

(b) For a scaffold designed for a working load of 750 pounds, not more than 3 employees shall be permitted to

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work at one time.

(7) Two or more scaffolds shall not be combined by bridging with planks or similar connecting links.

(8) Rollers or fenders shall be provided to prevent striking the building and to facilitate raising and lowering.

(9) The platform of a swing stage scaffold shall be 1 of the following types:

(a) Ladder-type platforms - The ladder-type platform shall be constructed to meet ANSI standard A10.8-1977 entitled "Scaffolding," which is adopted in these rules by reference and which may be inspected at the Lansing office of the department of consumer and industry services. The standard may be purchased at a cost as of the time of adoption of these rules of \$5.00 from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, MIOSHA Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(b) Plank-type platform - The plank-type platform shall be composed of not less than two 2 by 10-inch unspliced planks which are laid straight and which are cleated together on the underside, with the cleats starting 6 inches from each end and spaced at 12-inch intervals.

(c) Beam-type platform - The beam platform shall have side stringers made of lumber that is not less than 2 by 6 inches set on edge. The span between hangers shall not be more than 12 feet. The flooring shall be supported on 2 by 6-inch crossbeams which are laid flat, which are set into the upper edge of the stringers with a snug fit at intervals of not more than 4 feet center to center, and which are securely nailed in place. The flooring shall be 1 by 6-inch lumber or 3/4-inch plywood and shall be securely nailed. Floorboards shall not be spaced more than 1/2 of an inch apart.

(d) Manufactured picks - When used, a manufactured pick shall conform to the requirements of R 408.41217(3), (4), and (5).

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41234 Multilevel suspension scaffolds.

Rule 1234. (1) A multilevel suspension scaffold shall have a separate fall prevention device that allows a drop of not more than 12 inches installed at each support point connected with a line to the scaffold.

(2) The device shall be attached to a wire rope safety line equivalent to the support rope, and the safety line shall be secured to a substantial member of the structure separate from the support rope and to the ground.

(3) Each employee shall be protected by a personal fall arrest system as specified in Part 45. Fall Protection, being R 408.44501 et seq. Of the Michigan Administrative Code, attached to the scaffold.

(4) The multilevel suspension scaffold shall be in compliance with the provisions of R 408.41229 and R 408.41233.

(5) At the beginning of each new installation, after a multilevel suspension scaffold is completely suspended, the scaffold shall be tested by being set about 1 foot above the lowest elevation and loaded with 2 times the anticipated working load.

(6) A support for a platform shall be attached directly to the support stirrup and not to any other platform.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1996 MR 8, Eff. Sept. 19, 1996; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41235 Single-point adjustable suspension scaffolds.

Rule 1235. (1) A single-point adjustable suspension scaffold shall be raised or lowered by an electrical, air motor-driven, or manual hoisting machine.

(2) A single-point adjustable suspension scaffold shall travel only in a vertical line.

(3) At the beginning of each new installation, after a single-point adjustable suspension scaffold is completely suspended, the scaffold shall be tested by being set about 1 foot above the lowest elevation and loaded with 2 times the anticipated working load.

(4) The suspension methods shall be as prescribed in R 408.41229.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41236 Needle beam scaffolds.

Rule 1236. (1) A needle beam scaffold shall be suspended from a structure that is capable of supporting

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not less than 4 times the weight of the scaffold and intended load.

(2) The beams of a needle beam scaffold shall be of wood not less than 4 by 6 inches, with the greater dimension set vertically, or of equivalent structural metal.

(3) A needle beam scaffold shall not be altered or moved while in use.

(4) The distance between the needle beams shall not be more than 8 feet, the length of needle beams shall be not more than 12 feet, and the needle beams shall be supported at points 12 inches from the ends.

(5) Rope supports shall be of 1-inch, first-grade manila rope or synthetic rope of equivalent strength and shall be hung vertically. The rope shall be attached to the needle beams in a manner that prevents the needle beams from rolling or otherwise becoming displaced.

(6) The scaffold planking shall be in compliance with all of the following provisions:

(a) Be laid tight between supporting ropes.

(b) Be secured against displacement. Cleats are not an adequate means of attachment.

(c) Extend not more than 6 inches beyond the beam.

(7) Tools, bolts, and nuts on a needle beam scaffold shall be kept in containers that are properly secured on the scaffold.

(8) One end of a needle beam scaffold may be supported by and secured to a permanent structural member.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41237

Source: 1996 AACS.

R 408.41238

Source: 1996 AACS.

R 408.41239 Catenary scaffolds.

Rule 1239. (1) Not more than 1 platform shall be placed between consecutive vertical pickups, and not more than 2 platforms shall be used on a catenary scaffold.

(2) A platform supported by wire ropes shall have hook-shaped stops on each end of the platform to prevent it from slipping off the wire ropes. The hooks shall be placed to prevent the platform from falling if 1 of the horizontal wire ropes breaks.

(3) A wire rope shall not be tightened to the extent that the application of a scaffold load will overstress the wire rope.

(4) A wire rope shall be continuous and not have splices between anchors.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41240 Interior hung scaffolds.

Rule 1240. (1) An interior scaffold shall be suspended only from the roof structure or other structural member such as a ceiling beam.

(2) An overhead supporting member (roof structure, ceiling beams, or other structural members) shall be inspected and checked for strength before the scaffold is erected.

(3) Suspension ropes and cables shall be connected to the overhead supporting members by shackles, clips, thimbles, or other means that meet the strength and durability of the suspension ropes and cables.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

MOBILE SCAFFOLDS

R 408.41241 Mobile scaffolds.

Rule 1241. (1) When a freestanding mobile scaffold is used, the height shall not be more than 4 times the minimum base dimension.

(2) Outriggers, when used, may be considered as part of the base dimension. The outriggers shall be installed on both sides of the scaffold at each frame line.

(3) Locking devices shall be used to secure the casters to the frame or adjusting screw. The adjusting screw

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shall not extend more than 12 inches. The casters shall be provided with a positive locking device to prevent movement of the scaffold. The device shall be used when the scaffold is in use, except where the work platform is 4 feet or less from the floor.

(4) Vertical members of the scaffold shall be braced by cross bracing and diagonal bracing. Not less than 2 horizontal diagonal braces shall be installed, 1 as close to the casters as possible, at intervals of not more than 4 times the least-based dimension. The horizontal diagonal brace may be omitted on a scaffold that is specifically designed to absorb racking.

(5) A scaffold platform shall cover the full width of the scaffold, except for a necessary entrance opening. A platform shall be secured in place. A platform shall not extend outward beyond the base supports of the scaffold unless outrigger frames or equivalent devices are used to ensure stability.

(6) A ladder or stairway that is provided on a manually propelled mobile scaffold shall be affixed or built into the scaffold and shall be so located that, when in use, the ladder or stairway does not have a tendency to tip the scaffold. A landing platform shall be provided at intervals of not more than 30 feet.

(7) In place of a ladder or stairway, the requirements of R 408.41211(2) may be complied with.

(8) Only manual force shall be used to move a scaffold covered by this rule. The force shall be applied near or as close to the base as practical, except for a scaffold with a work platform that is 4 feet or less from the floor.

(9) When being used, a mobile scaffold shall rest upon a suitable footing and shall stand plumb. Where leveling of the scaffold is necessary, screw jacks or an equivalent means shall be used.

(10) An employer shall not allow an employee to ride on a mobile scaffold, unless all of the following conditions exist:

(a) The floor or surface is within 3 degrees of level and is free from pits, holes, or obstructions.

(b) The minimum base dimension of the scaffold when ready for rolling is not less than $\frac{1}{2}$ of the height.

(c) The casters are equipped with rubber or similar resilient tires.

(d) All tools and materials are secured or removed from the platform before the mobile scaffold is moved.

(e) The scaffold is equipped with guardrails on all sides.

(f) Before a scaffold is moved, each employee on the scaffold shall be made aware of the move.

(11) A mobile scaffold shall be in compliance with the applicable provisions of R 408.41217, R 408.41218, R 408.41223, and R 408.41224.

(12) A power system used to propel a mobile scaffold shall be designed to propel a mobile scaffold. A forklift, truck, similar motor vehicle, or add-on motor shall not be used to propel a scaffold unless the scaffold is designed to be propelled by a forklift, truck, similar motor vehicle, or add-on motor.

(13) If a power system is used to propel a scaffold, then the propelling force shall be applied directly to the wheel and shall not produce a speed of more than 1 foot per second (.3 meters per second).

(14) An employee shall not be on any part of a powered mobile scaffold that extends outward beyond the wheels, casters, or other supports.

(15) A powered mobile scaffold shall be stabilized to prevent tipping during movement.

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41242

Source: 1997 AACS.

R 408.41243

Source: 1997 AACS.

R 408.41244

Source: 1997 AACS.

R 408.41245

Source: 1997 AACS.

R 408.41246

Source: 1997 AACS.

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R 408.41251 Outrigger scaffolds.

Rule 1251. (1) The inboard end of an outrigger beam measured from the fulcrum point to anchorage point shall be not less than 1 1/2 times the outboard end in length. The beams shall rest on edge, the sides shall be plumb, and the edges shall be horizontal. The fulcrum point of the beam shall rest on a secure bearing not less than 6 inches in each horizontal dimension. The beam shall be secured in place against movement and shall be securely braced at the fulcrum point against tipping.

(2) The inboard end of an outrigger beam shall be securely anchored either by means of struts bearing against sills in contact with the overhead beams or ceiling or by means of tension members secured to the floor joists underfoot, or by both if necessary. The inboard end of an outrigger beam shall be secured against tipping, and the entire supporting structure shall be securely braced in both directions to prevent any horizontal movement.

(3) An outrigger scaffold shall be constructed as prescribed in table 4.

(4) Planking shall be laid tight and shall extend to within 3 inches of the building wall. Planking shall be secured to the outriggers.

(5) A scaffold and scaffold components shall be designed by a qualified person who is knowledgeable in scaffolding and shall be constructed and loaded in accordance with the design.

(6) Table 4 reads as follows:

TABLE 4
SPACING AND LENGTH OF OUTRIGGER SCAFFOLDS

Maximum Scaffold Load	Light Duty	Medium Duty
	25 psf	50 psf
Outrigger size	2 by 10 feet	3 by 10 feet
Maximum outrigger spacing	8 feet	6 feet
Maximum outrigger length	6 feet	6 feet

History: 1979 ACS 7, Eff. June 17, 1981; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

AUXILIARY SUPPORTED SCAFFOLDS

R 408.41252

Source: 1997 AACS.

R 408.41253

Source: 1981 AACS.

R 408.41254

Source: 1981 AACS.

R 408.41255

Source: 1990 AACS.

R 408.41256

Source: 1981 AACS.

R 408.41256a step, platform, and trestle ladder scaffolds.

Rule 1256a. (1) A scaffold platform shall not be placed higher than the second highest rung or step of the ladder supporting the platform.

(2) A ladder used in conjunction with a step, platform, and trestle ladder scaffold shall be in compliance with

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the pertinent requirements of construction safety standard Part 11. Fixed and Portable Ladders, being R 408.41101 et seq. of the Michigan Administrative Code, except that job-made ladders shall not be used to support a step, platform, or trestle scaffold.

(3) A ladder used to support a step, platform, and trestle ladder scaffold shall be placed, fastened, or equipped with a device to prevent slipping.

(4) A scaffold shall not be bridged to another scaffold.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41256b repair bracket scaffolds.

Rule 1256b. (1) Brackets shall be secured in place by at least 1 wire rope that is at least ½ of an inch (1.27 centimeter) in diameter.

(2) Each bracket shall be attached to the securing wire rope or ropes by either a positive locking device capable of preventing the unintentional detachment of the bracket from the rope or by equivalent means.

(3) Each bracket, at the contact point between the supporting structure and the bottom of the bracket, shall have a shoe (heel block or foot) capable of preventing the lateral movement of the bracket.

(4) A platform shall be secured to the brackets in a manner that will prevent the separation of the platform from the brackets and the movement of the platform or the brackets on a completed scaffold.

(5) If a wire rope is placed around the structure to provide a safe anchorage for personal fall arrest systems used by employees erecting or dismantling scaffolds, then the wire rope shall be in compliance with the requirements of construction safety standard Part 45. Fall Protection, being R 408.44501 et seq. of the Michigan Administrative Code, or this part, but shall be at least 5/16 of an inch (0.8 centimeter) in diameter.

(6) A wire rope used for securing brackets in place or as an anchorage for personal fall arrest systems shall be protected from damage due to contact with edges, corners, protrusions, or other discontinuities of the supporting structure or scaffold components.

(7) The tensioning of a wire rope used for securing brackets in place or as an anchorage for personal fall arrest systems shall be accomplished either by means of a turnbuckle at least 1 inch (2.54 centimeter) in diameter or by equivalent means.

(8) A turnbuckle shall be connected to the other end of its rope using an eye splice thimble of a size appropriate to the turnbuckle to which it is attached.

(9) U-bolt wire rope clips shall not be used on any wire rope used to secure brackets or to serve as an anchor for personal fall arrest systems.

(10) An employer shall ensure that materials shall not be dropped to the outside of the supporting structure.

(11) Scaffold erection shall progress in only 1 direction around any structure.

History: 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

R 408.41257

Source: 1997 AACS.

R 408.41258

Source: 1997 AACS.

R 408.41259

Source: 1997 AACS.

R 408.41260

Source: 1997 AACS.

WIRE, FIBER, AND SYNTHETIC ROPE

R 408.41261 Wire rope generally.

Rule 1261. (1) A wire rope shall be inspected for defects by a competent person before each work shift and after every occurrence could affect a rope's integrity. A rope shall be replaced if any of the following conditions exist:

(a) Physical damage that impairs the function and strength of the rope.

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- (b) Kinks that might impair the tracking or wrapping or rope around the drum or sheaves.
- (c) Six randomly distributed broken wires in 1 rope lay or 3 broken wires in 1 strand in 1 rope lay.
- (d) Abrasion, corrosion, scrubbing, flattening, or peening that has caused the loss of more than 1/3 of the original diameter of the outside wires.
- (e) Heat damage caused by a torch or any damage caused by contact with electrical wires.
- (f) Evidence that the secondary brake has been activated during an overspeed condition and has engaged the suspension rope.
- (2) Wire rope that is bent to form an eye over a bolt or rod which has a diameter of less than 4 times the rope diameter shall be equipped with a metal thimble.
- (3) Swaged attachments or spliced eyes on wire suspension ropes shall not be used unless they are made by the wire rope manufacturer or a qualified person.
- (4) If wire rope clips are used on suspension scaffolds, then all of the following provisions apply:
 - (a) Clips shall be installed according to the manufacturer's recommendations.
 - (b) Clips shall be retightened to the manufacturer's recommendations after the initial loading.
 - (c) Clips shall be inspected and retightened to the manufacturer's recommendations at the start of each work shift.
 - (d) U-bolt clips shall not be used at the point of suspension for any scaffold hoist.
 - (e) If U-bolt clips are used, then the U-bolt shall be placed over the dead end of the rope and the saddle shall be placed over the live end of the rope.
- (5) Wire ropes shall be stored in a manner to prevent damage or deterioration.
- (6) Before cutting wire rope, an employee shall place a seizing on each side of the cut on preformed wire rope.
- (7) Wire rope shall be maintained in a lubricated condition over its entire length with the same type lubricant used by the manufacturer.
- (8) Seizing or an equivalent protection shall be provided at all wire rope ends.
- (9) Wire rope shall not come in contact with sharp edges.
- (10) Wire rope used to suspend scaffolds shall not be spliced.
- (11) Table 5 reads as follows:

TABLE 5
NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Number of Clips			
Improved plow steel, rope Diameter (inches)	Drop Forged	Other Material	Minumum Spacing (inches)
5/16	3	4	3
3/8	3	4	3
1/2	3	4	3
5/8	3	4	3 3/4
3/4	4	5	4 1/2
7/8	4	5	5 1/4
1	5	6	6
1 1/8	6	6	6 3/4
1 1/4	6	7	7 1/2
1 3/8	7	7	8 1/4
1 1/2	7	8	9

History: 1979 ACS 7, Eff. June 17, 1981; 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 7, Eff. May 17, 1999.

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R 408.41262

Source: 1981 AACs.

R 408.41263

Source: 1981 AACs.

R 408.41264 Window jack scaffolds.

Rule 1264. (1) A window jack scaffold shall be used as a work platform for not more than 1 employee and only for the purpose of working at the window opening through which the jack is placed.

(2) A window jack scaffold shall consist of a work platform that is secured to the structure with braces that run from a point not more than 4 inches from the end of the platform to the structure at an angle of not less than 45 degrees to the horizontal.

(3) An interior horizontal brace which extends not less than 12 inches beyond the vertical edges of the opening and which is capable of supporting not less than 4 times the intended load shall be secured to the work platform, tight to the interior surface of the wall, to prevent the outward movement of the platform.

(4) A window jack scaffold shall be provided with guardrails unless a harness that has a lifeline is attached and provided by the employer for the employee as required in Part 45. Fall Protection, being R 408.44501 et seq. of the Michigan Administrative Code.

(5) A window jack shall not be used to support planks placed between one window jack and another or for other elements of scaffolding.

History: 1990 MR 6, Eff. June 19, 1990; 1999 MR 4, Eff. Apr. 21, 1999; 1999 MR 5, Eff. May 17, 1999.

PART 13. MOBILE EQUIPMENT

R 408.41301 Adoption by reference of federal OSHA standard.

Rule 1301. (1) The provisions of 29 C.F.R. §§1926.600 to 1926.606, 1926.1000, 1926.1001, 1926.1002, and 1926.1003, as revised December 1, 1998, are adopted by reference in these rules, except as noted in subrules (2) to (6) of this rule, and may be inspected at the Lansing office of the department of consumer and industry services. The federal construction standard may be purchased at a cost as of the time of adoption of this rule of 75 cents by ordering page 66274 of volume 63 of the Federal Register, December 1, 1998, from the Superintendent of Documents, Washington DC 20402, or from the Occupational Safety and Health Administration Area Office, 801 South Waverly, Lansing, Michigan 48917. These sections are available at no cost from the Michigan Department of Consumer and Industry Services, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909-8143.

(2) As of the effective date of this part, subpart K and section 1518.550, referenced in 29 C.F.R. §§1926.600, means Part 17. Electrical Installations and Part 10. Lifting and Digging Equipment, being R 408.41701a et seq. and R 408.41001a et seq., respectively.

(3) As of the effective date of this part, section 1926.2, referenced in 29 C.F.R. §§1926.602, means Part 12. Variances, being R 408.22201 et seq. As of the effective date of this part, subparts N and W, referenced in 29 C.F.R. §§1926.602, means Part 10. Lifting and Digging Equipment and Part 13. Mobile Equipment, being R 408.41001a et seq. and R 408.41301 et seq., respectively.

(4) As of the effective date of this part, subpart N, referenced in 29 C.F.R. §§1926.603, means Part 10. Lifting and Digging Equipment, being R 408.41001a et seq.

(5) Paragraph (d)(1) of 29 C.F.R. §§1926.605 is excepted. Paragraph (d)(1) has been adopted by the Michigan department of consumer and industry services in R 408.40132(1) to (7).

(6) Paragraph (d)(3) of 29 C.F.R. §§1926.605 is amended to read as follows: "Employees walking or working on the unguarded decks of barges shall be protected with United States coast guard-approved work vests or buoyant vests provided for as prescribed in R 408.40617 and R 408.40636.

History: 1954 ACS 78, Eff. Mar. 2, 1974; 1954 ACS 88, Eff. Sept. 16, 1976; 1979 AC; 1979 ACS 16, Eff. Oct. 18, 1983; 1997 MR 2, Eff. Mar. 2, 1997; 1999 MR 7, Eff. Jul. 20, 1999.

PART 14. TUNNELS, SHAFTS, CAISSONS, AND COFFERDAMS
GENERAL PROVISIONS

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R 408.41401
Source: 1993 AACS.

R 408.41454
Source: 1993 AACS.

R 408.41455
Source: 1989 AACS.

R 408.41456
Source: 1984 AACS.

R 408.41462
Source: 1996 AACS.

R 408.41463
Source: 1993 AACS.

R 408.41464
Source: 1993 AACS.

R 408.41465
Source: 1984 AACS.

R 408.41466
Source: 1993 AACS.

R 408.41467
Source: 1993 AACS.

TUNNELS AND SHAFTS

R 408.41472
Source: 1996 AACS.

R 408.41475
Source: 1993 AACS.

R 408.41476
Source: 1993 AACS.

R 408.41478
Source: 1996 AACS.

R 408.41479
Source: 1996 AACS.

COFFERDAMS AND CAISSONS

R 408.41481
Source: 1996 AACS.

R 408.41482
Source: 1996 AACS.

R 408.41483
Source: 1989 AACS.

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PART 16. POWER TRANSMISSION AND DISTRIBUTION

R 408.41601
Source: 1982 AACS.

R 408.41625
Source: 1982 AACS.

R 408.41626
Source: 1982 AACS.

R 408.41627
Source: 1985 AACS.

R 408.41628
Source: 1982 AACS.

R 408.41629
Source: 1982 AACS.

R 408.41630
Source: 1985 AACS.

R 408.41631
Source: 1982 AACS.

R 408.41632
Source: 1985 AACS.

R 408.41633
Source: 1985 AACS.

R 408.41634
Source: 1996 AACS.

R 408.41635
Source: 1982 AACS.

R 408.41636
Source: 1982 AACS.

R 408.41637
Source: 1982 AACS.

R 408.41638
Source: 1982 AACS.

R 408.41639
Source: 1982 AACS.

R 408.41640
Source: 1982 AACS.

R 408.41641
Source: 1982 AACS.

R 408.41642
Source: 1982 AACS.

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R 408.41643
Source: 1982 AACS.

R 408.41644
Source: 1985 AACS.

R 408.41645
Source: 1985 AACS.

R 408.41646
Source: 1982 AACS.

R 408.41647
Source: 1985 AACS.

R 408.41648
Source: 1985 AACS.

R 408.41649
Source: 1985 AACS.

R 408.41650
Source: 1982 AACS.

R 408.41651
Source: 1982 AACS.

R 408.41652
Source: 1982 AACS.

R 408.41653
Source: 1982 AACS.

R 408.41654
Source: 1982 AACS.

R 408.41655
Source: 1982 AACS.

R 408.41656
Source: 1982 AACS.

R 408.41657
Source: 1982 AACS.

R 408.41658
Source: 1982 AACS.

PART 17. ELECTRICAL INSTALLATIONS

R 408.41733
Source: 1982 AACS.

PART 18. FIRE PROTECTION AND PREVENTION

R 408.41801
Source: 1995 AACS.

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R 408.41836
Source: 1983 AACs.

R 408.41837
Source: 1995 AACs.

R 408.41838
Source: 1983 AACs.

R 408.41841
Source: 1995 AACs.

R 408.41842
Source: 1995 AACs.

R 408.41850
Source: 1995 AACs.

R 408.41851
Source: 1995 AACs.

R 408.41852
Source: 1995 AACs.

R 408.41853
Source: 1995 AACs.

R 408.41854
Source: 1983 AACs.

R 408.41855
Source: 1983 AACs.

R 408.41856
Source: 1983 AACs.

R 408.41861
Source: 1983 AACs.

R 408.41862
Source: 1983 AACs.

R 408.41863
Source: 1983 AACs.

R 408.41864
Source: 1995 AACs.

R 408.41865
Source: 1983 AACs.

R 408.41866
Source: 1995 AACs.

R 408.41867
Source: 1983 AACs.

R 408.41868
Source: 1983 AACs.

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R 408.41869
Source: 1995 AACs.

R 408.41871
Source: 1995 AACs.

R 408.41872
Source: 1983 AACs.

R 408.41873
Source: 1983 AACs.

R 408.41874
Source: 1983 AACs.

R 408.41875
Source: 1983 AACs.

R 408.41876
Source: 1995 AACs.

R 408.41877
Source: 1983 AACs.

R 408.41878
Source: 1983 AACs.

R 408.41879
Source: 1983 AACs.

R 408.41881
Source: 1983 AACs.

R 408.41882
Source: 1983 AACs.

R 408.41883
Source: 1983 AACs.

R 408.41884
Source: 1983 AACs.

PART 19. TOOLS

R 408.41926
Source: 1989 AACs.

R 408.41927
Source: 1989 AACs.

R 408.41928
Source: 1989 AACs.

R 408.41929
Source: 1989 AACs.

R 408.41932
Source: 1989 AACs.

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R 408.41933

Source: 1989 AACS.

R 408.41934

Source: 1989 AACS.

R 408.41935

Source: 1995 AACS.

R 408.41936

Source: 1982 AACS.

R 408.41937

Source: 1989 AACS.

R 408.41943

Source: 1982 AACS.

R 408.41944

Source: 1997 AACS.

R 408.41945

Source: 1997 AACS.

Editor's note: Pursuant to section 56 of Act No. 306 of the Public Acts of 1969, as amended, being §24.256 of the Michigan Compiled Laws, the phrase "...which is adopted ub..." was corrected to read "...which is adopted in..."

R 408.41949

Source: 1997 AACS.

R 408.41951

Source: 1989 AACS.

R 408.41955

Source: 1989 AACS.

R 408.41957

Source: 1989 AACS.

R 408.41958

Source: 1997 AACS.

R 408.41959

Source: 1989 AACS.

R 408.41960

Source: 1989 AACS.

R 408.41961

Source: 1995 AACS.

R 408.41962

Source: 1989 AACS.

R 408.41963

Source: 1997 AACS.

R 408.41964

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Source: 1989 AACS.

R 408.41966

Source: 1995 AACS.

R 408.41970

Source: 1989 AACS.

R 408.41971

Source: 1989 AACS.

R 408.41972

Source: 1989 AACS.

R 408.41973

Source: 1989 AACS.

R 408.41974

Source: 1989 AACS.

R 408.41975

Source: 1989 AACS.

R 408.41976

Source: 1989 AACS.

R 408.41977

Source: 1989 AACS.

R 408.41978

Source: 1989 AACS.

R 408.41979

Source: 1989 AACS.

R 408.41980

Source: 1995 AACS.

PART 20. DEMOLITION

R 408.42001

Source: 1981 AACS.

R 408.42023 Definitions.

Rule 2023. (1) "Balling" means to demolish by mechanically swinging a weighted ball.

(2) "Clamming" means to demolish by use of a clam bucket.

(3) "Competent person" means a person who is experienced and capable of identifying an existing or potential hazard in surroundings, or under working conditions, that are hazardous or dangerous to an employee and who has the authority and knowledge to take prompt corrective measures to eliminate the hazards.

(4) "Demolition" means to dismantle, tear down, or raze.

(5) "Hazardous substance" means a substance that is toxic, corrosive, a strong sensitizer, flammable, or explosive.

(6) "Manual demolition" means stripping or demolition by hand labor.

(7) "Mechanical demolition" means demolition by powered equipment other than hand-held tools.

History: 1979 ACS 6, Eff. Mar. 24, 1981; 2000 MR 21, Eff. Jan. 4, 2001.

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R 408.42031 Demolition generally.

Rule 2031. (1) Before the start of a demolition operation, an employer shall ensure that all of the following are done:

(a) An engineering survey of the structure and equipment is conducted by a competent person knowledgeable in demolition to determine all of the following:

- (i) The condition of the foundation, roof, walls, and floors.
- (ii) Whether any adjacent structure will be affected by the demolition.
- (iii) The utility service entering the building.
- (iv) Any other conditions and equipment affecting the safety of an employee.

(b) An employer shall ensure that there is a written report of the survey at the field office until the completion of the job. The report shall include information such as the name of the person conducting the survey, date of the survey, and hazardous substances and dangerous conditions found and their location. In an emergency situation, a survey is not required. If a field office does not exist at the demolition site, then an employer shall file the written report of the survey at the employer's main office.

(c) An employer shall inform utility companies of the planned demolition. An employer shall ensure that utility services are shut off, capped, or otherwise protected from damage, except as specified in subrule (2) of this rule.

(d) An employer shall ensure that glazed sash and doors and other glass that might cause an injury shall be protected or removed before demolition starts.

(2) During demolition, an existing standpipe system shall remain in service as long as possible, and any sprinkler or standpipe system in a portion of a structure that is not subject to demolition shall remain in service.

(3) If an employee is required to work in a structure that has been damaged by fire, flood, or explosion, then an employer shall ensure that the affected walls and floors are shored or braced before manual demolition starts.

(4) If an area or item, such as a pipe, tank, or bin, is known or suspected to contain a hazardous substance, then an employer shall ensure that testing is performed and the hazard eliminated before demolition is permitted to begin.

(5) An employer shall ensure that manual demolition of structural components starts at the top of the structure and proceeds downward so that each level is completely dropped before the next lower wall and floor is dropped, except that if a connection portion is a different level, then that portion may be removed first. This requirement does not prohibit the cutting of a floor for the removal of materials if the requirements of R 408.42044 are complied with.

(6) An employer shall ensure that an employee shall not be exposed to weather conditions during demolition work if weather conditions constitute a hazard.

(7) During manual demolition of a structure of skeleton steel construction, the steel framing may be left in place, but an employer shall ensure that all structural supports are cleared of loose material as the demolition proceeds downward.

(8) An employer shall ensure that an employee is not permitted to work on a floor below a floor opening when demolition is conducted on the upper level, unless the employee is protected by a solid barricade not less than 42 inches high and located not less than 6 feet back from the projected edge of the opening above.

(9) During demolition, an employer or his or her designated representative shall make daily inspections to detect hazards and unsafe conditions. An employer shall ensure that an employee is not permitted to work where hazards exist until the hazards are corrected by shoring, bracing, or other effective means.

History: 1979 ACS 6, Eff. Mar. 24, 1981; 2000 Mr 21, Eff. Jan. 4, 2001.

R 408.42032

Source: 1996 AACS.

R 408.42033

Source: 1981 AACS.

R 408.42034

Source: 1981 AACS.

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R 408.42041
Source: 1996 AACS.

R 408.42043
Source: 1981 AACS.

R 408.42044
Source: 1981 AACS.

R 408.42045
Source: 1981 AACS.

R 408.42046
Source: 1981 AACS.

R 408.42047
Source: 1981 AACS.

PART 21. GUARDING OF WALKING AND WORKING AREAS

R 408.42101
Source: 1996 AACS.

R 408.42121
Source: 1996 AACS.

R 408.42122
Source: 1996 AACS.

R 408.42123
Source: 1996 AACS.

R 408.42127
Source: 1993 AACS.

R 408.42128
Source: 1993 AACS.

R 408.42129
Source: 1993 AACS.

R 408.42130
Source: 1993 AACS.

R 408.42131
Source: 1996 AACS.

R 408.42140
Source: 1997 AACS.

R 408.42141
Source: 1997 AACS.

R 408.42142
Source: 1997 AACS.

R 408.42143
Source: 1997 AACS.

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R 408.42144
Source: 1997 AACS.

R 408.42145
Source: 1996 AACS.

R 408.42146
Source: 1997 AACS.

R 408.42147
Source: 1997 AACS.

R 408.42148
Source: 1997 AACS.

R 408.42149
Source: 1989 AACS.

R 408.42150
Source: 1996 AACS.

R 408.42151
Source: 1997 AACS.

R 408.42152
Source: 1997 AACS.

R 408.42153
Source: 1997 AACS.

R 408.42154
Source: 1989 AACS.

R 408.42155
Source: 1993 AACS.

R 408.42156
Source: 1993 AACS.

R 408.42157
Source: 1993 AACS.

R 408.42158
Source: 1997 AACS.

R 408.42159
Source: 1989 AACS.

R 408.42160
Source: 1996 AACS.

PART 22. SIGNALS, SIGNS, TAGS, AND BARRICADES

R 408.42210
Source: 1997 AACS.

R 408.42211
Source: 1995 AACS.

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R 408.42213
Source: 1995 AACS.

R 408.42221
Source: 1995 AACS.

R 408.42222
Source: 1995 AACS.

R 408.42223
Source: 1995 AACS.

R 408.42229
Source: 1995 AACS.

R 408.42230
Source: 1995 AACS.

R 408.42231
Source: 1995 AACS.

R 408.42232
Source: 1997 AACS.

R 408.42238
Source: 1995 AACS.

R 408.42243
Source: 1995 AACS.

PART 24. TAR KETTLES

R 408.42401
Source: 1991 AACS.

R 408.42403
Source: 1981 AACS.

R 408.42404
Source: 1981 AACS.

R 408.42407
Source: 1996 AACS.

PART 25. CONCRETE CONSTRUCTION

R 408.42501
Source: 1993 AACS.

R 408.42516
Source: 1993 AACS.

R 408.42517
Source: 1989 AACS.

R 408.42518
Source: 1996 AACS.

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R 408.42519

Source: 1980 AACS.

R 408.42520

Source: 1996 AACS.

R 408.42521

Source: 1996 AACS.

R 408.42522

Source: 1989 AACS.

R 408.42523

Source: 1989 AACS.

R 408.42524

Source: 1989 AACS.

R 408.42525

Source: 1980 AACS.

R 408.42526

Source: 1980 AACS.

R 408.42527

Source: 1989 AACS.

R 408.42528

Source: 1989 AACS.

R 408.42531

Source: 1989 AACS.

R 408.42532

Source: 1993 AACS.

R 408.42533 Lift-slab operations.

Rule 2533. (1) A registered professional engineer who is qualified in lift-slab operations shall design and plan lift-slab operations. An employer shall implement the plans and designs and shall include detailed instructions and sketches that indicate the prescribed method of erection. The plans and designs shall also include provisions for ensuring lateral stability of the building or structure during construction.

(2) An employer shall ensure that jacks are marked to indicate the rated capacity established by the manufacturer.

(3) An employer shall ensure that jacks are not loaded beyond the rated capacity established by the manufacturer.

(4) An employer shall ensure that jacking equipment is not overloaded and the threaded rods and other members that transmit loads to the jacks are capable of supporting not less than 2 1/2 times the load to be applied. Jacking equipment shall include all of the following:

(a) Jacks and other lifting units.

(b) Lifting angles.

(c) Lifting nuts.

(d) Hook-up collars.

(e) T-caps.

(f) Shearheads.

(g) Columns and footings.

(5) An employer shall ensure that a jack is designed and installed so that it will not lift or continue to lift

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when it is loaded in excess of its rated capacity.

(6) An employer shall ensure that a jack has a safety device installed that will cause the jack to support the load in any position if the jack malfunctions or loses its lifting ability.

(7) An employer shall ensure that jacking operations are synchronized to ensure even and uniform lifting of the slab. An employer shall ensure that, during lifting, all points of the slab support are kept within 1/2 of an inch of that needed to maintain the slab in a level position.

(8) If leveling is automatically controlled, then an employer shall ensure that a device is installed which will stop the operation when the 1/2-inch tolerance specified in subrule (7) of this rule is exceeded or when there is a malfunction in the jacking system.

(9) An employer shall ensure that the maximum number of manually controlled jacks on 1 slab is limited to a number, which shall not be more than 14, that will permit the operation to maintain the slab level within specified tolerances. The controls shall be located near a qualified person.

(10) An employer shall ensure that an employee, except for an employee who is essential to the jacking operation, is not permitted in the building while any jacking operation is taking place. For the purpose of this subrule, a jacking operation begins when a slab or group of slabs is lifted and ends when the slabs are secured with either temporary connections or permanent connections.

(11) An employer shall ensure that an employee is not permitted under a slab during jacking operations.

(12) An employer shall ensure that all welding on temporary and permanent connections is performed in accordance with the requirements of the American national standards institute and American welding society standards ANSI/AWS D1.1-86 entitled "Structural Welding Code - Steel," and ANSI/AWS B1.10-86 entitled "Guide for the Nondestructive Inspection of Welds." These standards are adopted by reference in these rules and are available for purchase, at a cost as of the time of adoption of these rules of \$50.00 and \$12.00, respectively, from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036, the American Welding Society, 550 N.W. Le Jeune Road, P.O. Box 351040 Miami, FL 33125, and from the Standards Division, Michigan Department of Consumer and Industry Services, P.O. Box 30643, Lansing, Michigan 48909. An employer shall ensure that welders are familiar with the welding requirements specified in the lift-slab plan and specifications.

(13) An employer shall ensure that load transfer from jacks to building columns is not executed until the welds on the column shear plates are cooled to air temperature.

(14) An employer shall ensure that jack-lifting units are positively secured to building columns so that the units do not become dislodged or dislocated.

(15) An employer shall ensure that equipment is designed and installed so that the lifting rods cannot slip out of position or the employer shall initiate other measures, such as the use of locking or blocking devices, that will provide attachments and prevent components from disengaging during lifting operations.

History: 1979 ACS 2, Eff. Mar. 27, 1980; 1989 MR 11, Eff. Dec. 1, 1989; 1993 MR 7, Eff. July 29, 1993; 1999 MR 4, Eff. Apr. 21, 1999.

R 408.42534

Source: 1989 AACS.

R 408.42535

Source: 1989 AACS.

PART 26. STEEL AND PRECAST ERECTION

R 408.42601

Source: 1985 AACS.

R 408.42606

Source: 1985 AACS.

R 408.42609

Source: 1985 AACS.

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R 408.42610

Source: 1985 AACS.

R 408.42611—R 408.42613

Source: 1997 AACS.

R 408.42614

Source: 1985 AACS.

R 408.42615

Source: 1985 AACS.

R 408.42617

Source: 1985 AACS.

R 408.42618

Source: 1985 AACS.

R 408.42621

Source: 1985 AACS.

R 408.42623

Source: 1985 AACS.

R 408.42630

Source: 1985 AACS.

R 408.42632

Source: 1985 AACS.

R 408.42640

Source: 1985 AACS.

R 408.42642

Source: 1985 AACS.

R 408.42650

Source: 1985 AACS.

R 408.42654

Source: 1985 AACS.

R 408.42656

Source: 1985 AACS.

PART 27. BLASTING AND USE OF EXPLOSIVES

R 408.42701

Source: 1982 AACS.

R 408.42724

Source: 1982 AACS.

R 408.42725

Source: 1982 AACS.

R 408.42726

Source: 1982 AACS.

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R 408.42727
Source: 1982 AACS.

R 408.42728
Source: 1982 AACS.

R 408.42731
Source: 1982 AACS.

R 408.42732
Source: 1982 AACS.

R 408.42733
Source: 1982 AACS.

R 408.42734
Source: 1982 AACS.

R 408.42735
Source: 1988 AACS.

R 408.42737
Source: 1982 AACS.

R 408.42741
Source: 1994 AACS.

R 408.42742
Source: 1982 AACS.

R 408.42743
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R 408.42744
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R 408.42758
Source: 1982 AACS.

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R 408.42759
Source: 1982 AACS.

R 408.42761
Source: 1982 AACS.

R 408.42762
Source: 1982 AACS.

R 408.42763
Source: 1982 AACS.

R 408.42799
Source: 1988 AACS.

PART 30. TELECOMMUNICATIONS

R 408.43005
Source: 1982 AACS.

PART 31. DIVING OPERATIONS

R 408.43106
Source: 1994 AACS.

R 408.43109
Source: 1994 AACS.

R 408.43121
Source: 1994 AACS.

R 408.43155
Source: 1994 AACS.

R 408.43156
Source: 1994 AACS.

R 408.43162
Source: 1994 AACS.

PART 32. AERIAL WORK PLATFORMS

R 408.43201
Source: 1992 AACS.

R 408.43202 Equipment covered.

Rule 3202. These rules apply to equipment that has a primary function of elevating personnel, together with their tools and necessary materials, on a platform which is mechanically positioned. The units covered are described by the following American national standards institute standards:

(a) ANSI standard A92.2-1990, vehicle-mounted elevating work platforms, which is adopted by reference in these rules and which is available at a cost as of the time of adoption of these rules of \$68.00 from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, telephone number 1-800-854-7179, e-mail GLOBAL@IHS.COM. This standard is available for review at the Michigan Department of Consumer and Industry Services, Standards Division, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, MI 48909. This standard applies to vehicle-mounted devices installed on commercial chassis and covers the following type of units (See figure 1):

- (i) Extensible boom aerial devices.
- (ii) Aerial ladders.

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- (iii) Articulating boom aerial devices.
 - (iv) Vertical towers.
 - (v) A combination of any of the equipment specified in paragraphs (i) to (iv) of this subdivision.
 - (b) ANSI standard A92.3-1990, manually propelled elevating work platforms, which is adopted by reference in these rules and which is available at a cost as of the time of adoption of these rules of \$68.00. This standard applies to work platforms which are manually propelled, which are vertically adjustable by manual or powered means, and which may be towed or manually moved horizontally on wheels or casters that are an integral part of the work platform base. (See figure 2).
 - (c) ANSI standard A92.5-1992, boom-supported elevating work platforms, which is adopted by reference in these rules and which is available at a cost as of the time of adoption of these rules of \$68.00. This standard applies to all integral frame, boom-supported elevating work platforms which telescope, articulate, rotate, or extend beyond the base dimensions. (See figure 3).
 - (d) ANSI standard A92.6-1999, self-propelled elevating work platforms, which is adopted by reference in these rules and which is available at a cost as of the time of adoption of these rules of \$68.00. This standard applies to self-propelled vertically adjustable integral chassis work platforms. Such work platforms are power-operated with primary controls for all movement operated from the platform. (See figure 4).
- History: 1992 MR 6, Eff. July 9, 1992; 2000 MR 5, Eff. Apr. 27, 2000.

R 408.43203

Source: 1992 AACs.

R 408.43204

Source: 1992 AACs.

R 408.43205 Construction.

Rule 3205. (1) Aerial work platforms shall be designed, constructed, and tested so as to be in compliance with the requirements of the following applicable American national standards institute standards:

- (a) ANSI standard A92.2-1990, vehicle-mounted elevating and rotating aerial devices.
- (b) ANSI standard A92.3-1990, manually propelled elevating work platforms.
- (c) ANSI standard A92.5-1992, boom-supported elevating work platforms.
- (d) ANSI standard A92.6-1999, self-propelled elevating and rotating aerial devices.

These standards are adopted by reference in R 408.43202.

(2) Aerial work platforms shall not be field-modified for uses other than those intended by the manufacturer, unless the modification has been certified in writing by the manufacturer or by any other equivalent entity, such as a nationally recognized testing laboratory, to be in compliance with the applicable ANSI standard and this rule, and to be at least as safe as the equipment was before modification.

(3) Directional controls shall be in compliance with all of the following provisions:

- (a) Be of the type that will automatically return to the off or neutral position when released.
- (b) Be protected against inadvertent operation.
- (c) Be clearly marked as to their intended function.

(d) An overriding control shall be provided in the platform which must be continuously activated for platform directional controls to be operational and which automatically returns to the off position when released.

(4) Aerial work platforms shall be equipped with emergency controls at ground level.

(5) Emergency ground level controls shall be clearly marked as to their intended function and be capable of overriding the platform controls.

(6) All of the following information shall be clearly marked in a permanent manner on each aerial work platform.

- (a) Special workings, cautions, or restrictions necessary for operation.
- (b) Rated work load.
- (c) A clear statement of whether or not the aerial work platform is electrically insulated.

(7) Rotation shafts, gears, and other moving parts that are exposed to contact shall be guarded as prescribed in general industry standard, Part 7. Guards for Power Transmission, being R 408.10701 et seq. of the Michigan Administrative Code.

(8) Attachment points shall be provided for fall protection devices for personnel who occupy the platform on

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aerial work platforms described in the provisions of R 408.43202(a) and (c). (See figures 1 and 3).
History: 1992 MR 6, Eff. July 9, 1992; 2000 MR 5, Eff. Apr. 27, 2000.

R 408.43206 Inspection, maintenance, and testing.

Rule 3206. An employer shall comply with all of the following requirements:

- (a) Each aerial work platform shall be inspected, maintained, repaired, and kept in proper working condition in accordance with the manufacturer's or owner's operating or maintenance and repair manual or manuals.
- (b) Any aerial work platform found not to be in a safe operating condition shall be removed from service until repaired. All repairs shall be made by an authorized person in accordance with the manufacturer's or owner's operating or maintenance and repair manual or manuals.
- (c) If the aerial work platform is rated and used as an insulated aerial device, the electrical insulating components shall be tested for compliance with the rating of the aerial work platform in accordance with ANSI standard A92.2-1990, Section 6.

Such testing shall comply with all of the following provisions:

- (i) The test shall be performed not less than annually.
 - (ii) Written, dated, and signed test reports shall be made available by the employer for examination by a department of consumer and industry services representative.
 - (iii) The insulated portion of an aerial device shall not be altered in any manner that might reduce its insulating value.
 - (d) All danger, caution, and control markings and operational plates shall be legible and not obscured.
- History: 1992 MR 6, Eff. July 9, 1992; 2000 MR 5, Eff. Apr. 27, 2000.

R 408.43207

Source: 1992 AACs.

R 408.43208

Source: 1992 AACs.

R 408.43209 Operating procedures.

Rule 3209. (1) The aerial work platform shall be used only in accordance with the manufacturer's or owner's operating instructions and safety rules.

(2) The following clearances shall be maintained when operating aerial work platforms or other equipment under, over, by, or near energized electric power lines:

VOLTAGE MINIMUM CLEARANCE

0 to 50 kv. 10 feet

More than 50 kv. 10 feet + .4 inch per kv.

(3) The clearance requirements set forth in subrule (2) of this rule do not apply to the following situations:

(a) Where work is performed from an insulated aerial device that is insulated for the work and the work is performed in accordance with the provisions of construction safety standard Part 16. Power Transmission and Distribution, being R 408.41601 et seq. of the Michigan Administrative Code, and Part 30. Telecommunications, being R 408.43001 et seq. of the Michigan Administrative Code.

(b) Where the electric power transmission or distribution lines have been de-energized and visibly grounded at the point of work or where insulating barriers that are not a part of an attachment to the aerial work platform have been erected to prevent physical contact with the line.

(c) Where work is being performed by 2 licensed journeypersons electricians on equipment up to .5 kv.

(4) Two licensed journeypersons will be required for work within the minimum clearance on equipment over .5 kv.

(5) Proximity warning devices may be used, but shall not be used instead of meeting the requirements contained in subrules (2) and (3) of this rule.

(6) The manufacturer's rated load capacity shall not be exceeded. The employer shall ensure that the load and its distribution on the platform are in accordance with the manufacturer's specifications. The aerial work platform rated load capacity shall not be exceeded when loads are transferred to the platform at elevated heights.

(7) Only personnel, their tools, and necessary materials shall be on or in the platform.

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- (8) The guardrail system of the platform shall not be used to support any of the following:
- (a) Materials.
 - (b) Other work platforms.
 - (c) Employees.
- (9) Personnel shall maintain firm footing on the platform while working on the platform. The use of railings, planks, ladders, or any other devices on the platform for achieving additional height is prohibited.
- (10) Fuel gas cylinders shall not be carried on platforms that would allow the accumulation of gases.
- (11) A safety harness that has a lanyard which is in compliance with construction safety standard Part 45. Fall Protection, being R 408.44501 et seq. of the Michigan Administrative Code, and which is affixed to attachment points provided and approved by the manufacturer, shall be provided by the employer and used by any occupant of an aerial work platform described in the provisions of R 408.43202(a) and (c) and figures 1 and 3. A fall arrest system shall only be used where the aerial lift is designed to withstand the vertical and lateral loads caused by an arrested fall.
- (12) A body belt may be used with a restraint device with the lanyard and the anchor arranged so that the employee is not exposed to any fall distance. A restraint device is required where the aerial lift cannot withstand the vertical and lateral loads imposed by an arrested fall.
- (13) Belting off to an adjacent pole, structure, or equipment while working from an aerial work platform is prohibited.
- (14) An employer shall not allow employees to exit an elevated aerial work platform, except where elevated work areas are inaccessible or hazardous to reach. Employees may exit the platform with the knowledge and consent of the employer. When employees exit to unguarded work areas, fall protection shall be provided and used as required in construction safety standard Part 45. Fall Protection, being R 408.44501 et seq. of the Michigan Administrative Code.
- (15) Only aerial work platforms that are equipped with a manufacturer's installed platform controls for horizontal movement shall be moved while in the elevated position.
- (16) Before and during driving while elevated, an operator of a platform shall do both of the following:
- (a) Look in the direction of, and keep a clear view of, the path of travel and make sure that the path is firm and level.
 - (b) Maintain a safe distance from all of the following:
 - (i) Obstacles.
 - (ii) Debris.
 - (iii) Drop-offs.
 - (iv) Holes.
 - (v) Depressions.
 - (vi) Ramps.
 - (vii) Overhead obstructions.
 - (viii) Overhead electrical lines.
 - (ix) Other hazards to safe elevated travel.
- (17) Outriggers or stabilizers, when provided, are to be used in accordance with the manufacturer's instructions. Outriggers and stabilizers shall be positioned on pads or a solid surface.
- (18) Aerial work platforms shall be elevated only when on a firm and level surface or within the slope limits allowed by the manufacturer's instructions.
- (19) A vehicle-mounted aerial work platform (figure 1) shall have its brakes set before elevating the platform.
- (20) A vehicle-mounted aerial work platform (figure 1) shall have wheel chocks installed before using the unit on an incline.
- (21) Climbers shall not be worn while performing work from an aerial work platform.
- (22) Platform gates shall be closed while the platform is in an elevated position.
- (23) Stunt driving and horseplay are prohibited.
- (24) Altering, modifying, or disabling safety devices or interlocks is prohibited.
- (25) Care shall be taken by the employer to prevent ropes, cords, and hoses from becoming entangled in the aerial work platform.
- (26) A platform operator shall ensure that the area surrounding the aerial work platform is clear of

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personnel and equipment before lowering the platform.

(27) Before and during travel, except as provided for horizontal movement in subrule (15) of this rule, an operator shall do all of the following:

(a) Inspect to see that booms, platforms, aerial ladders, or towers are properly cradled or secured.

(b) Ensure that outriggers are in a stored position.

(c) Limit travel speed according to the following factors:

(i) Condition of the surface.

(ii) Congestion.

(iii) Slope.

(iv) Location of personnel.

(v) Other hazards.

(28) The aerial work platform shall not be positioned against another object to steady the platform.

(29) The aerial work platform shall not be operated from a position on a truck, trailer, railway car, floating vessel, scaffold, or similar equipment.

(30) The boom and platform of the aerial work platform shall not be used to move or jack the wheels off the ground unless the machine is designed for that purpose by the manufacturer.

(31) If the platform or elevating assembly becomes caught, snagged, or otherwise prevented from normal motion by adjacent structures or other obstacles so that control reversal does not free the platform, all personnel shall be removed from the platform before attempts are made to free the platform.

History: 1992 MR 6, Eff. July 9, 1992; 1996 MR 8, Eff. Sept. 19, 1996; 2000 MR 5, Eff. Apr. 27, 2000.

R 408.43210

Source: 1992 AACS.

PART 42. HAZARD COMMUNICATION

R 408.44201

Source: 1995 AACS.

R 408.44202

Source: 1995 AACS.

R 408.44203

Source: 1995 AACS.

PART 45. FALL PROTECTION

R 408.44501

Source: 1996 AACS.

R 408.44502

Source: 1996 AACS.

PART 51. AGRICULTURAL TRACTORS

R 408.45101

Source: 1997 AACS.

PART 91. PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS

R 408.49101 Scope.

Rule 9101. (1) This part applies to the manufacturing, keeping, having, storing, selling, transporting, and using of explosives, blasting agents, and pyrotechnics. These rules do not apply to the sale and use (public display) of pyrotechnics, commonly known as fireworks, or to the use of explosives in the form

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prescribed in the official United States pharmacopeia.

(2) The manufacture of explosives, as defined in the provisions of 29 C.F.R. §1910.109(a)(3), explosives, shall also be in compliance with the requirements contained in the provisions of 29 C.F.R. §1910.119.

(3) The manufacture of pyrotechnics as defined in the provisions of 29 C.F.R. §1910.109(a)(10) shall also be in compliance with the provisions of these rules.

History: 1993 MR 7, Eff. July 24, 1993; 1999 MR 8, Eff. Aug. 19, 1999.

R 408.49102 Adoption of standards by reference.

Rule 9102. The federal occupational safety and health administration's regulations on process safety management of highly hazardous chemicals that have been promulgated by the United States department of labor and have been codified at 29 C.F.R. §1910.119, including appendix A, with an effective date of May 26, 1992, and which were amended March 7, 1996, appearing in the Federal Register on pp. 9238, are adopted by reference in these rules as of the effective date of these rules. The definitions referred to in R 408.49101(2) and (3) and codified at 29 C.F.R. §1910.109(a)(3) and (10) are adopted in these rules by reference. The adopted regulations may be obtained from the Michigan Department of Consumer and Industry Services, Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at no charge as of the time of adoption of these rules, or from the United States Department of Labor, Occupational Safety and Health Administration, 801 S. Waverly Rd., Room 306, Lansing, MI 48917, at no charge as of the time of adoption of these rules.

History: 1993 MR 7, Eff. July 24, 1993; 1999 MR 8, Eff. Aug. 19, 1999.

DEPARTMENT OF EDUCATION
VOCATIONAL-TECHNICAL EDUCATION SERVICE
STANDARDS FOR ISSUANCE OF WORK PERMITS

R 409.1

Source: 1980 AACS.

R 409.2

Source: 1980 AACS.

R 409.3

Source: 1980 AACS.

R 409.4

Source: 1980 AACS.

R 409.5

Source: 1980 AACS.

R 409.6

Source: 1980 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
DIRECTOR'S OFFICE
WORKER'S COMPENSATION APPELLATE COMMISSION
ADMINISTRATIVE APPELLATE PROCEDURE

R 418.1

Source: 1991 AACS.

R 418.2

Source: 1991 AACS.

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R 418.3
Source: 1991 AACS.

R 418.4
Source: 1991 AACS.

R 418.5
Source: 1991 AACS.

R 418.6
Source: 1991 AACS.

R 418.7
Source: 1991 AACS.

R 418.8
Source: 1991 AACS.

WORKER'S COMPENSATION BOARD OF MAGISTRATES

R 418.51
Source: 1996 AACS.

R 418.52
Source: 1996 AACS.

R 418.53
Source: 1996 AACS.

R 418.54
Source: 1996 AACS.

R 418.55
Source: 1996 AACS.

R 418.56
Source: 1996 AACS.

R 418.57
Source: 1996 AACS.

R 418.58
Source: 1996 AACS.

BUREAU OF WORKER'S DISABILITY COMPENSATION
WORKER'S COMPENSATION HEALTH CARE SERVICES

PART 1. GENERAL PROVISIONS

R 418.101 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; 2000 MR 9 Eff. Jul 6, 2000.

R 418.102 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff Dec. 11, 1996; 2000 MR 9 Eff. Jul 6, 2000.

R 418.103 RESCINDED.

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History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.104 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.105 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.106 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.107 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.108 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; 2000 MR 9 Eff. Jul 6, 2000.

R 418.109 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; 2000 MR 9 Eff. Jul 6, 2000.

R 418.110 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; 1998, MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.111 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.112 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.113 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.114 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.115 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.116 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR6, Rescinded.

R 418.117 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.118 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

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R 418.119 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998, MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.120 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.121 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.122 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.123 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.124 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.125 RESCINDED.

History: 1995 MR6, Eff. Oct. 6, 1995; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.126 RESCINDED.

History: 1995 MR6, Eff. Oct. 6, 1995; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.127 RESCINDED.

History: 1995 MR6, Eff. Oct. 6, 1995; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.128 RESCINDED.

History: 1995 MR6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998, MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.129 RESCINDED.

History: 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9 Eff. Jul 6, 2000.

R 418.130 RESCINDED

History: 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.131 RESCINDED.

History: 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.132 RESCINDED.

History: 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 2. MEDICINE AND EVALUATION AND MANAGEMENT SERVICES

R 418.201 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.202 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.203 RESCINDED

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.204 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989, 1996 MR8, Rescinded.

R 418.205 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.206 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.207 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.208 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.209 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.210 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.211 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.212 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR6, Eff. Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.213 RESCINDED.

History: 1988 ASC, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.214 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Rescinded.

R 418.215 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.216 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Rescinded.

PART 3. ANESTHESIA

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R 418.301 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1995 MR 6, Oct. 6, 1995; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.302 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.303 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.304 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.305 RESCINDED.

History: 1991 ACS, Eff. February 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.306 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.307 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.308 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.309 RESCINDED.

History: 1995 MR6, Eff. Oct. 6, 1995; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 4. SURGERY

R 418.401 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.402 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.403 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.404 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.405 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.406 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.407 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.408 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.409 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.410 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.411 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998, MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.412 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.413 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.414 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.415 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.416 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.417 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.418 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 5. RADIOLOGY, RADIATION THERAPY, AND NUCLEAR MEDICINE

R 418.501 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR 6, Eff. Oct. 6 1995; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.502 RESCINDED

History: 1988 ACS, Eff. June 26, 1989; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.503 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.504 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Rescinded.

R 418.505 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.506 RESCINDED

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.507 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.508 RESCINDED.

History: 1995 MR 6, Eff. Oct. 6, 1995; rescinded 1998 MR 2, Eff. May 26, 1998.

R 418.509 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 6. PATHOLOGY AND LABORATORY

R 418.601 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.602 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.603 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.604 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.605 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.606 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.607 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.608 RESCINDED

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.609 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.610 RESCINDED.

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History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.611 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.612 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 7. DENTAL

R 418.701 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.702 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.703 RESCINDED.

History: 1988 ACS Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.704 RESCINDED.

History: 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.705 RESCINDED.

History: 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 8. AMBULANCE SERVICE

R 418.801 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.802 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 9. HOME HEALTH AGENCY

R 418.901 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.902 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.903 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.904 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.905 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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PART 10. PHARMACY AND MEDICAL SUPPLY SERVICE

R 418.1001 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1002 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1003 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1004 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1005 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, May 12, 1993; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1006 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1007 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 11. OCCUPATIONAL THERAPY AND PHYSICAL THERAPY

R 418.1101 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1102 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1103 RESCINDED.

History: 1996 MR 8, Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1104 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1105 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1106 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 12. ORTHOTIC AND PROSTHETIC EQUIPMENT

R 418.1201 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.1202 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1203 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1204 RESCINDED.

History: 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 13. HEARING SERVICE

R 418.1301 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1302 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 14. VISION AND PROSTHETIC OPTICAL SERVICE

R 418.1401 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1402 RESCINDED.

History: 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 15. MISCELLANEOUS SUPPLIER

R 418.1501 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1502 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1503 RESCINDED.

History: 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 16. FACILITY SERVICE

R 418.1601 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1602 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1603 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.1604 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1605 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996 rescinded 1998 MR 2, Eff. May 26, 1998.

R 418.1606 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1607 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1608 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1609 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR2, Eff. May 26, 1998.

R 418.1610 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Rescinded.

R 418.1611 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1612 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1613 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1614 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1615 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1616 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1617 RESCINDED.

History: 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 17. TECHNICAL AND PROFESSIONAL HEALTH CARE REVIEW

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R 418.1701 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1702 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1703 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1704 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1705 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1706 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1707 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1708 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 18. DATA ACQUISITION FROM CARRIERS, PROVIDERS, AND FACILITIES

R 418.1801 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1802 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1803 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1804 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1993 ACS, Eff. May 12, 1993; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

**PART 19. PROCESS FOR RESOLVING DIFFERENCES
BETWEEN CARRIER AND PROVIDER REGARDING BILL**

R 418.1901 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1902 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.1903 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1904 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.1905 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

**PART 20. RECONSIDERATION AND APPEAL OF ACTIONS OF
REGARDING HOSPITAL'S MAXIMUM PAYMENT RATIO AND
CERTIFICATION OF CARRIER'S PROFESSIONAL REVIEW PROGRAM**

R 418.2001 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2002 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2003 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2004 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2005 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 21. PAYMENT

R 418.2101 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989 (R 418.111); 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2102 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989 (R 418.112); 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2103 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989 (R 418.113); 1991 ACS, Eff. Feb. 19, 1992; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2104 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2105 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989 (R 418.2205); 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.2106 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2107 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2108 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2109 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2110 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2111 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2112 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2113 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2114 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2115 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2116 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2117 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2118 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

R 418.2119 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Rescinded.

PART 22. BILLING BY PRACTITIONER OR HEALTH CARE ORGANIZATION

R 418.2201 RESINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2202 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

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R 418.2203 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2204 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2205 RESCINDED.

History: 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2206 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1993 ACS, Eff. May 12, 1993; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

PART 23. FEE SCHEDULE

R 418.2301 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2302 RESCINDED.

History: 1988 ACS, Eff. June 26, 1989; 1991 ACS, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2303 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2304 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; rescinded 1996 MR 8, Eff. Dec. 11, 1996.

R 418.2305 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; rescinded 1996 MR 8, Eff. Dec. 11, 1996.

R 418.2306 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; rescinded 1998 MR 2, Eff. May 26, 1998.

R 418.2307 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; rescinded 1998 MR 2, Eff. May 26, 1998.

R 418.2308 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2308a RESCINDED.

History: 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6,

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2000.

R 418.2309 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2310 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2311 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2312 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2313 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2314 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2315 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2316 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2317 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2318 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2319 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2320 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2321 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1996 MR 8, Eff. Dec. 11, 1996; rescinded 1998 MR 2, Eff. May 26, 1998.

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R 418.2322 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2323 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1993 MR 4, Eff. May 12, 1993; 1995 MR 6, Eff. Oct. 6, 1995; 1996 MR 8, Eff. Dec. 11, 1996; 1998 MR 2, Eff. May 26, 1998; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2324 RESCINDED.

History: 1988 MR 12, Eff. June 28, 1989; 1991 MR 12, Eff. Feb. 19, 1992; 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.

R 418.2325 RESCINDED.

History: 1996 MR 8, Eff. Dec. 11, 1996; Rescinded 2000 MR 9, Eff. Jul 6, 2000.